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Fission Cross Section of  $^{238}\text{Pu}$   
from Persimmon

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**Fission Cross Section of  $^{238}\text{Pu}$**   
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**M. G. Silbert**

LOS ALAMOS NATL LAB LIBS.  
  
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FISSION CROSS SECTION OF  $^{238}\text{Pu}$  FROM PERSIMMON<sup>t</sup>

by

M. G. Silbert

ABSTRACT

The neutron-induced fission cross section of  $^{238}\text{Pu}$  has been measured from 17 eV to 3 MeV. The nuclear explosion Persimmon provided an intense, single-pulse neutron source spanning an energy range of more than five decades. Neutrons from this underground source were sorted according to energy by time of flight over a 300-m vertical path and interacted with  $^{238}\text{Pu}$  and with flux monitors at ground level. The cross section reported is the average from detectors at  $55^\circ$  and  $80^\circ$  to the neutron beam.

I. METHOD

A. General

The use of nuclear explosions in the measurement of neutron-induced fission cross sections has been described in previous reports.<sup>1-5</sup> Persimmon was a nuclear explosion detonated 300 m underground. An evacuated vertical pipe allowed a well-collimated, 1.9-cm-diam beam of neutrons to enter the experimental apparatus at ground level. The long flight path in this experiment separated the neutrons by time of flight, that is, by velocity, so that 17-eV neutrons arrived at the target foils about 5 msec after detonation. The neutron beam passed through a series of thin foils in a large vacuum chamber. The reaction products at each foil were detected by semiconductor particle detectors positioned close to the foils, but outside the neutron beam. Each foil was at  $45^\circ$  to the neutron beam. The detectors were oriented at  $55^\circ$ ,  $80^\circ$ , or  $90^\circ$  to the neutron beam in such a position that each detector was at  $45^\circ$  to its target foil. Since the reaction rate was in general too high to allow observation of individual reaction particles, the detectors were operated as current generators. The output current was pro-

portional to the product of the instantaneous neutron flux and the target cross section. The detector currents were amplified logarithmically to reduce the dynamic range to be recorded, and then sent to oscilloscopes for photographic recording. Since it was desired to achieve a time resolution under one  $\mu\text{sec}$  for a duration of 5 msec, the oscilloscope signals were recorded by moving-film cameras.

Detection of fission fragments from the reaction  $^{238}\text{Pu}(n, f)$  provided a signal proportional to the cross section to be measured. A blank backing foil determined the background. The neutron flux was monitored by the reactions  $^{235}\text{U}(n, f)$ ,  $^6\text{Li}(n, \alpha)$ , and  $^3\text{He}(n, p)$ .

B. Neutron Flux

The neutron flux<sup>6</sup> was derived from the  $^3\text{He}$ ,  $^6\text{Li}$ , and  $^{235}\text{U}$  signals in the following manner. Below  $10^2$  eV, the flux was based on  $^3\text{He}(n, p)$ , assuming a cross section of 5327 b at 0.0253 eV and  $1/v$  energy dependence.<sup>7</sup> Between  $10^2$  and  $10^3$  eV, the flux was based on  $^6\text{Li}(n, \alpha)$ , assuming a cross section of 940.8 b at 0.0253 eV and  $1/v$  energy dependence. The flux calculated in this manner was then used with the  $^{235}\text{U}$  signal to derive a  $^{235}\text{U}$  cross section between 15 and  $10^3$  eV. Table I compares selected

<sup>t</sup>This report represents a partial presentation of  $^{238}\text{Pu}$  fission data from Persimmon. A more complete report will be published by M. G. Silbert, A. Moat, and O. D. Simpson.

integrals of this  $^{235}\text{U}$  cross section with the values reported by de Saussure et al.<sup>8</sup>

TABLE I  
MEASURED  $^{235}\text{U}$  FISSION CROSS-SECTION INTEGRALS

$E_1$ (eV)	$E_2$ (eV)	Persimmon (b-eV)	ORNL-RPI (b-eV)	Persimmon ORNL-RPI
15.0	20.5	314	320	0.98
20.5	33.0	450	443	1.02
33	41	541	498	1.09
41	60	979	924	1.06
60	73	287	305	0.94
73	100	658	662	0.99
100	113	207	215	0.96
113	200	1890	1875	1.01
200	300	2030	2080	0.98
300	1000	7620	8100	0.94

Above  $10^3$  eV, the neutron flux was based directly on  $^{235}\text{U}(n, f)$ . Between  $10^3$  and  $10^4$  eV, the cross section of de Saussure et al.<sup>8</sup> was assumed. Above  $10^4$  eV, the assumed  $^{235}\text{U}$  cross section was based on the evaluations of Davey<sup>9</sup> and is presented in Table II. The neutron flux is illustrated in Fig. 1.

TABLE II  
REFERENCE  $^{235}\text{U}$  FISSION CROSS SECTION ABOVE  $10^4$  eV

$E_n$ (eV)	$\sigma_f$ 55° (b)	$\sigma_f$ 90° (b)
$1.05 \times 10^4$	3.10	3.10
$2.03 \times 10^4$	2.58	2.58
$3.03 \times 10^4$	2.28	2.28
$4.09 \times 10^4$	2.08	2.08
$4.99 \times 10^4$	1.96	1.96
$6.10 \times 10^4$	1.85	1.85
$7.45 \times 10^4$	1.74	1.74
$9.10 \times 10^4$	1.65	1.65
$1.01 \times 10^5$	1.63	1.63
$1.50 \times 10^5$	1.50	1.50
$2.02 \times 10^5$	1.41	1.41
$3.02 \times 10^5$	1.29	1.29
$4.08 \times 10^5$	1.22	1.22
$4.50 \times 10^5$	1.19	1.19
$4.98 \times 10^5$	1.17	1.17
$5.50 \times 10^5$	1.15	1.14
$6.08 \times 10^5$	1.14	1.13
$6.72 \times 10^5$	1.13	1.11
$7.43 \times 10^5$	1.15	1.13
$8.21 \times 10^5$	1.18	1.15
$9.07 \times 10^5$	1.21	1.16
$1.00 \times 10^6$	1.22	1.17
$1.11 \times 10^6$	1.22	1.17
$1.22 \times 10^6$	1.22	1.17
$1.35 \times 10^6$	1.22	1.17
$1.50 \times 10^6$	1.23	1.18
$1.65 \times 10^6$	1.25	1.20
$1.83 \times 10^6$	1.28	1.22

$E_n$ (eV)	$\sigma_f$ 55° (b)	$\sigma_f$ 90° (b)
$2.02 \times 10^6$	1.31	1.25
$2.23 \times 10^6$	1.31	1.25
$2.47 \times 10^6$	1.26	1.19
$2.73 \times 10^6$	1.21	1.14
$3.01 \times 10^6$	1.18	1.11

From the evaluations of Davey<sup>9</sup> and angular distributions of Simmons and Henkel.<sup>10</sup>

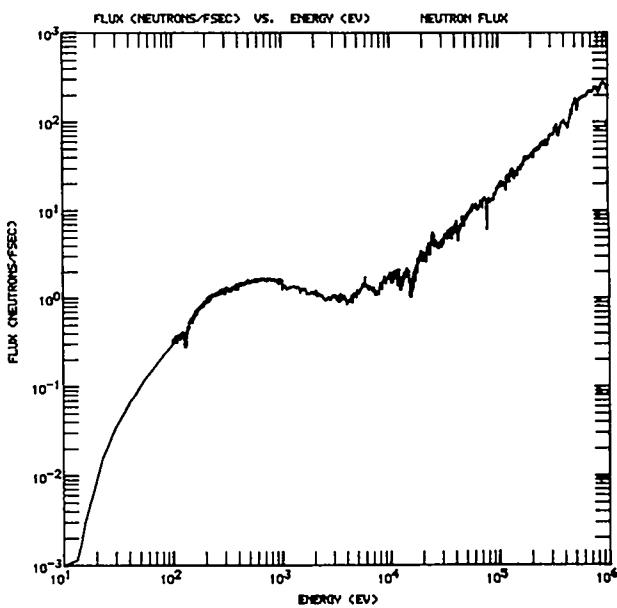


Fig. 1

The neutron source in this experiment was complex in that a neutron moderator was placed in the beam pipe just above the nuclear explosive. An explosion source alone would provide neutrons down to about  $10^3$  eV. The polyethylene moderator served as a secondary source of neutrons with energies down to 10 eV. At neutron energies above  $10^3$  eV, the neutron source was taken to be the explosion, with a flight path of 303.6 m and a source width of  $< 0.1$   $\mu\text{sec}$ . At neutron energies below  $10^3$  eV, the source was taken to be the moderator, with a flight path of 303.1 m, a source width of 6  $\mu\text{sec}$ , and a delay time to the peak of the neutron emission of 2  $\mu\text{sec}$ . These moderator characteristics were derived from an analysis of the shape and position in time of neutron resonances in  $^{238}\text{Pu}$ ,  $^{235}\text{U}$ , and Pt.

#### C. Background

The background to be subtracted from foil signals was measured by detectors viewing a bare Pt foil-backing in the same geometry as the samples. This background signal is illustrated in Fig. 2.

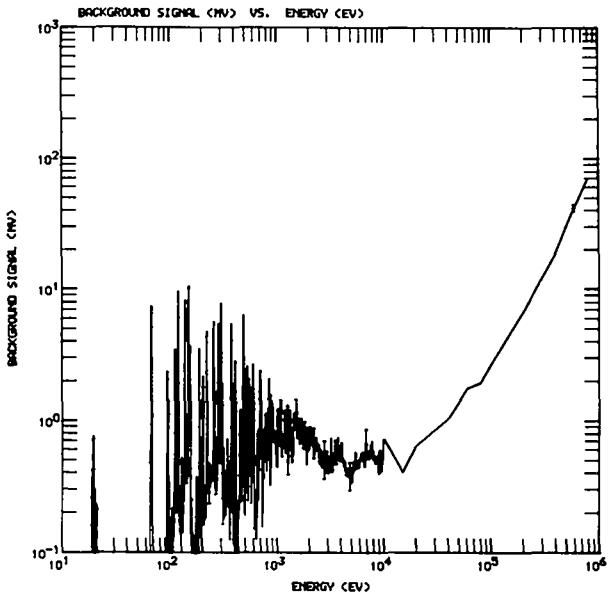


Fig. 2

It is dominated by two effects: (1) a signal at early times (high neutron energies) associated with beam interactions with the backing material, and (2) a later signal associated with neutron resonance reactions in the Pt backing.

#### D. Energy Scale

The neutron energy scale was derived from the equation

$$E = 5226.68 \left( \frac{D}{t - t_0} \right)^2 \quad (1)$$

with the energy E in electron volts, the flight path D in meters, and the flight time  $(t - t_0)$  in microseconds.

Time of flight was determined from time marks produced on the film records by a precision oscillator simultaneously with data recording. The intense, short-duration peak produced in each signal by the gamma-ray flash at explosion time provided a zero for the time scale, for neutrons directly from the explosion. Neutrons from the polyethylene moderator were delayed and spread out in time of emission by the diffusion and slowing-down process.

The time-mark generator was rated at an accuracy of  $\pm 1.5$  parts/ $10^5$ , which yields an uncertainty of  $\pm 0.075$   $\mu$ sec at 5 msec flight time. The uncertainty in the measurement of zero time from the gamma flash is estimated to be  $\pm 0.2$   $\mu$ sec. An indication of the reliability of the energy scale for higher energy neutrons is given by observation

of a sharp dip in the neutron flux due to a prominent resonance in  $^{208}\text{Pb}$ . Lead, in the neutron beam above and below the polyethylene moderator, reduced moderator heating and motion. This measurement gave a value of 78.3 keV for the resonance, which can be compared to 77 keV measured by Gibbons and Macklin<sup>11</sup> and 80 keV measured by Bilpuch et al.<sup>12</sup>

The flight path from the device center and the moderator to the targets was known from direct length measurements. Since the moderator could move upward in response to the explosion under it, the flight path at the time of neutron emission could be less than the original distance. Both the moderator position and the time of emission of moderated neutrons, assumed for simplicity to be the same for all neutrons of energies below  $10^3$  eV, were determined from the data by observation of resonances in  $^{235}\text{U}$ , Pt, and  $^{238}\text{Pu}$  whose energies were assumed to be known. This analysis yielded a moderator position 0.5 m above the device center, consistent with its original position, and a delay of 2  $\mu$ sec to the peak of neutron emission. The energy scale below  $10^3$  eV is then based on these assumed resonance energies from BNL-325<sup>13</sup> for  $^{235}\text{U}$  and Pt, and from Young et al.<sup>14</sup> for  $^{238}\text{Pu}$ .

#### E. Energy Resolution

The factors influencing the experimental neutron energy resolution include (1) the flight path, (2) the source time spread, (3) the source size, (4) the experimental resolving time, and (5) the Doppler width.<sup>1</sup> In this experiment, two separate neutron sources are involved: the explosion itself with a source time spread of less than 0.1  $\mu$ sec and the polyethylene moderator with a source time spread of 6  $\mu$ sec and a thickness of about 5 cm. The neutron pulse from the moderator exhibited a skewed distribution in time with a rapid rise and a slow decay. The electronics and recording system limited the time resolution to 0.2  $\mu$ sec.

#### II. $^{238}\text{Pu}$ TARGET FOIL

The target foil was  $\text{PuO}_2$  evaporated in a 4.0-cm-diam circle on a backing of 0.00063-cm-thick platinum soldered to a support ring. The total weight of  $^{238}\text{Pu}$  was determined by low-geometry alpha-particle counting to be  $5.14 \pm 0.15$  mg, assuming a half-life of 87.5 yr. Detailed survey of the distribution of the deposit showed a concentration of material toward the center so that the average

density of  $^{238}\text{Pu}$  at the position of the 1.9-cm-diam neutron beam was  $441 \mu\text{g/cm}^2$ , rather than the  $403 \mu\text{g/cm}^2$  that would correspond to a uniform deposit. Since the target was at  $45^\circ$  to the neutron beam, the effective density of material was  $441 \times 1.41^4 = 624 \mu\text{g/cm}^2$ .

The target had an isotopic composition of  $^{238}\text{Pu}$ , 98.9%;  $^{239}\text{Pu}$ , 0.6%;  $^{240}\text{Pu}$ , 0.09%;  $^{241}\text{Pu}$ , 0.01%; and  $^{242}\text{Pu}$ , 0.4%.

### III. DATA

Data recording and processing have been previously described in detail.<sup>2</sup> The  $^{238}\text{Pu}$  fission data reported here were generated by two semiconductor detectors, one at  $55^\circ$  and one at  $80^\circ$  to the neutron beam. The signal from each detector was recorded by two separate cameras, a high resolution (0.2  $\mu\text{sec}$ ) drum camera and a low resolution (1.0  $\mu\text{sec}$ ) streak camera. The cross section below 80 eV was derived from the streak film only, that between 80 and  $10^5$  eV was derived from both streak and drum films, and that above  $10^5$  eV was derived from drum film only.

An appropriate background, as determined from the blank foil, was subtracted from each signal. A correction was made for  $^{239}\text{Pu}$  in the target by subtracting 0.6% of the  $^{239}\text{Pu}$  fission cross section reported in LA-3586,<sup>3</sup> between 20 and  $10^4$  eV. The data in LA-3586 do not extend below 20 eV; therefore, the cross section in BNL-325<sup>13</sup> was used from 17 to 20 eV. Above  $10^4$  eV the correction is negligible. The corrections for the other isotopic contaminants in the sample were negligible.

Signals from the two detectors were averaged together with weights inversely proportional to the square of their random errors.

### IV. ERRORS

In processing the data, the experimental uncertainties have been separated into systematic (correlated) and random (uncorrelated) errors.<sup>2</sup> The systematic errors include those that influence the level of the entire cross section; an example is the uncertainty in the amount of  $^{238}\text{Pu}$  exposed to the neutron beam. The random errors include those that vary with time and/or signal level, such as the uncertainty in background subtraction, and those that vary from point to point, such as the statistical uncertainty in the number of fragments per time channel. The individual systematic errors

(standard deviations) are listed in Table III. In using  $^{235}\text{U}$  as a flux monitor and in averaging the two  $^{238}\text{Pu}$  signals, some of these systematic uncertainties are reduced so that the overall systematic error in the  $^{238}\text{Pu}$  cross section is  $\pm 5.3\%$ .

TABLE III  
SUMMARY OF SYSTEMATIC ERRORS

A. <u><math>^{238}\text{Pu}</math> signals</u>		55°	80°
		signal	signal
1.	Target density	$\pm 3\%$	$\pm 3\%$
2.	Detector solid angle	$\pm 3\%$	$\pm 2\%$
3.	Fragment energy collected	$\pm 2\%$	$\pm 1\%$
4.	Amplifier input resistance	$\pm 1\%$	$\pm 1\%$
B. <u>Neutron flux</u>			
1.	Target density, $^{235}\text{U}$	$\pm 2\%$	
2.	$^{235}\text{U}$ fission cross section	$\pm 4\%$	

The  $^{238}\text{Pu}$  fission fragment kinetic energy was taken from the empirical formula of Viola,<sup>15</sup> corrected for post-fission neutron emission.

In averaging cross sections from different detectors or different recording modes, the error of the average was taken to be the greater of the internal and external errors.

The statistical uncertainty varies widely with the product of neutron flux and fission cross section. For instance, in the MeV region each 0.2- $\mu\text{sec}$  time channel contains several times  $10^4$  fragments. In contrast, the resonance at 18.6 eV, in a region of low flux, contains about 2000 observed fragments integrated over the resonance. The resonance at 59.7 eV, in a region of higher flux, contains a total of about 500 observed fragments.

The uncertainties associated with each cross-section point in the Appendix include both systematic and random errors combined quadratically.

### V. CROSS SECTION

Integrals of the  $^{238}\text{Pu}$  cross section in selected energy intervals are given in Table IV. The  $^{238}\text{Pu}$  fission cross section (average from detectors at  $55^\circ$  and  $80^\circ$ ) is presented in Figs. 3-14 and in the Appendix. The results presented here are based on Los Alamos Scientific Laboratory data from the Persimmon event. A. Moat and collaborators at the Atomic Weapons Research Establishment, Aldermaston, England, have independent  $^{238}\text{Pu}$  fission cross-section data from Persimmon, which will be combined with these results in a future publication.

The line in Figs. 3-14 is drawn from point

TABLE IV  
 $^{238}\text{Pu}(n,f)$  CROSS-SECTION INTEGRALS

Energy Limits (eV)	$\int_{E_1}^{E_2} \sigma_f dE$	$\int_{E_1}^{E_2} (\sigma_f/E) dE$
	(b-eV)	(b)
$E_1$	$E_2$	
$1.0 \times 10^2$	$3.0 \times 10^2$	$1.66 \times 10^3$
$3.0 \times 10^2$	$1.0 \times 10^3$	$1.92 \times 10^3$
$1.0 \times 10^3$	$3.0 \times 10^3$	$2.97 \times 10^3$
$3.0 \times 10^3$	$1.0 \times 10^4$	$7.08 \times 10^3$
$1.0 \times 10^4$	$3.0 \times 10^4$	$1.62 \times 10^4$
$3.0 \times 10^4$	$1.0 \times 10^5$	$4.73 \times 10^4$
$1.0 \times 10^5$	$3.0 \times 10^5$	$1.67 \times 10^5$
$3.0 \times 10^5$	$1.0 \times 10^6$	$1.22 \times 10^6$
$1.0 \times 10^6$	$3.0 \times 10^6$	$4.36 \times 10^6$
		2.35

The standard deviation of each integral is  $\pm 5.5\%$ .

to point and has no other significance. Note that the ordinate in these figures is a combination of linear (-1.0 to +1.0 b) and logarithmic ( $10^0$  to  $10^3$  b) portions. The error bars drawn on every fiftieth point in each graph represent random errors only.

Between 600 eV and 1000 eV some of the structure evident in the resonances in Figs. 9 and 10 is due to the neutron source function. In particular, the high points at the high energy side of some of the peaks, e.g., that at 665 eV, are representative of the neutron source function and not of structure in the cross section. This peak can be taken as the prototype of the shape of a single resonance in this energy region while the peak centered at 710 eV represents two or three individual resonances. The neutron source function varies with time (neutron energy) and can best be observed in the narrowest peaks.

Table V lists the observed fission resonances below 500 eV. Imperfect subtraction of background and correction for  $^{239}\text{Pu}$  in the sample introduced large fluctuations between resonances and negative values in some regions. Low signal levels were accompanied by correspondingly large errors. Inspection of the original signals led to the assignment of resonances listed in Table V. A least squares fit of a straight line to the cumulative number of resonances vs neutron energy, for these 47 resonances plus two known to occur at 2.9 and 10.0 eV,<sup>14</sup> yields an average level spacing of 10.1 eV.

TABLE V  
LIST OF OBSERVED FISSION RESONANCES BELOW 500 eV

18.6 eV	118.6	216	368
(32.2)	122.4	221	382
(36.5)	129	245	391
59.7	132.3	252	409
70.1	139.7	285	419
77.7	151.2	289	427
83.0	165.0	300	448
96.1	171.1	306	463
99.6	176.8	321	473
110.2	182.9	327	496
111.4	192.5	337	
113.6	203	361	

#### VI. ACKNOWLEDGMENTS

Neutron cross sections derived from the nuclear explosion experiments are the result of the joint efforts of many people. In this experiment, special thanks are due to J. G. Povelites for preparation of the  $^{238}\text{Pu}$  sample, A. N. Ellis and E. R. Shunk for the experimental apparatus, and P. A. Seeger and J. A. Johnson for assistance in data reduction.

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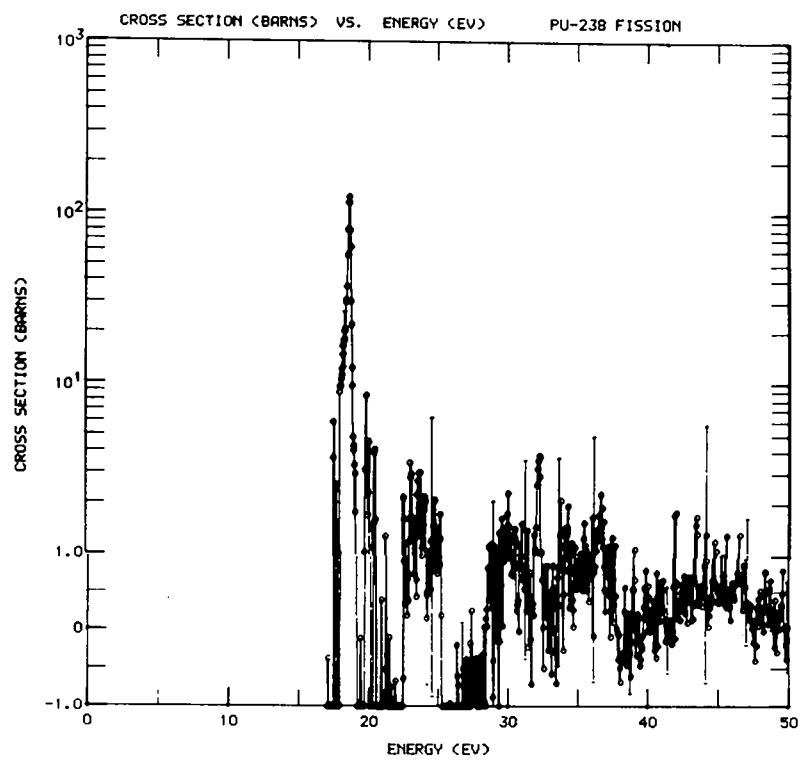


Fig. 3

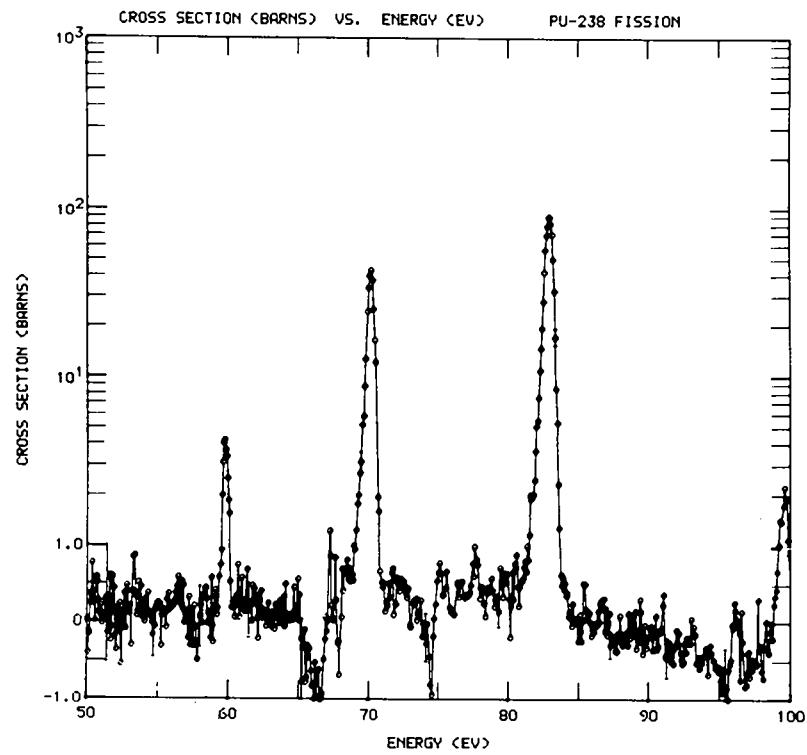


Fig. 4

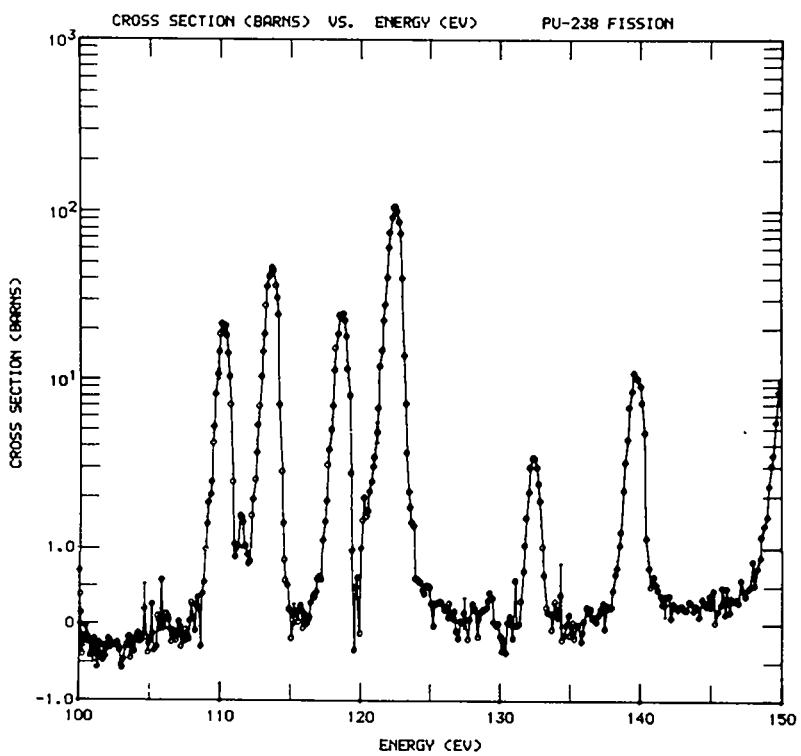


Fig. 5

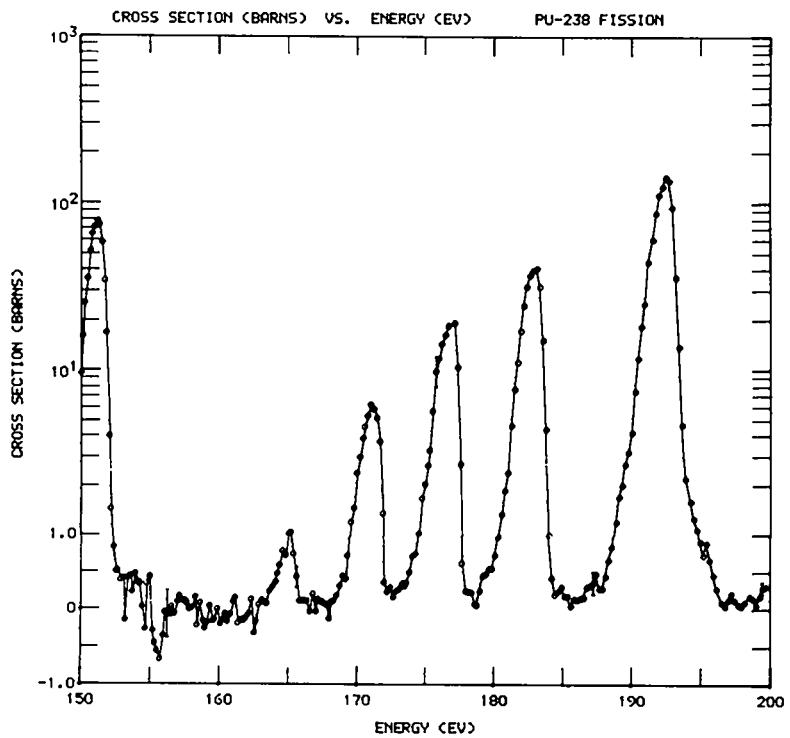


Fig. 6

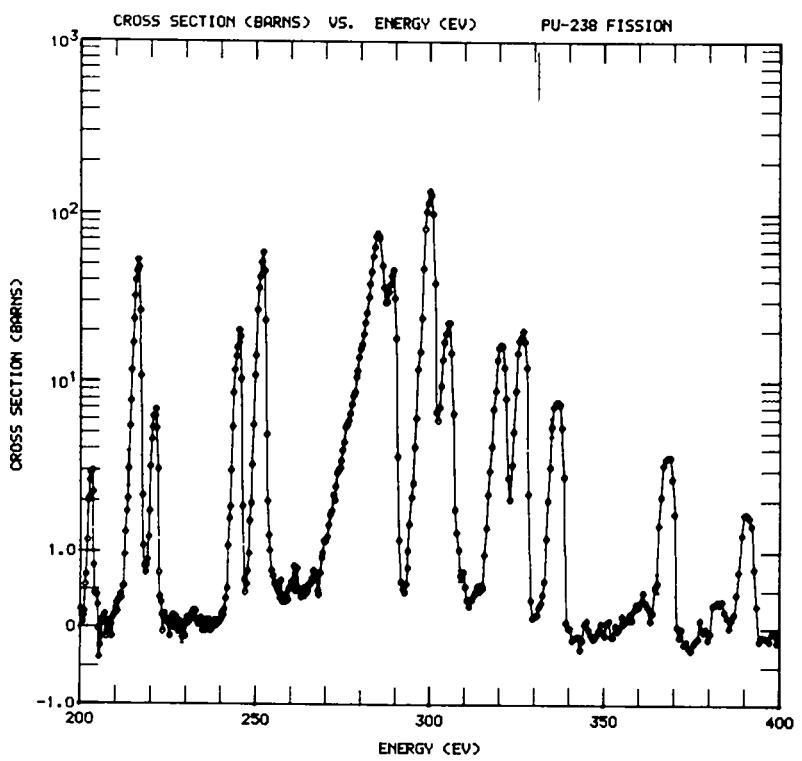


Fig. 7

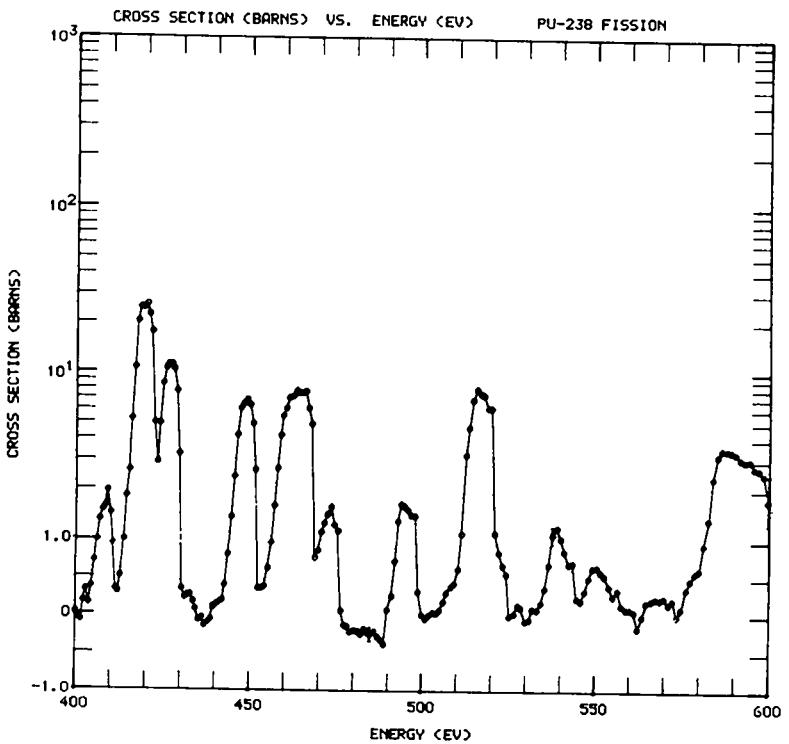


Fig. 8

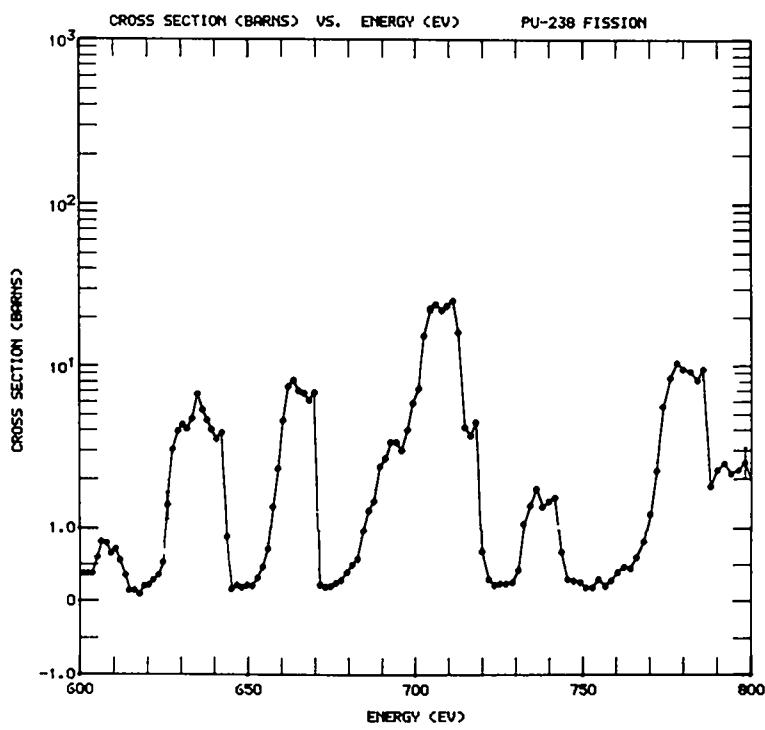


Fig. 9

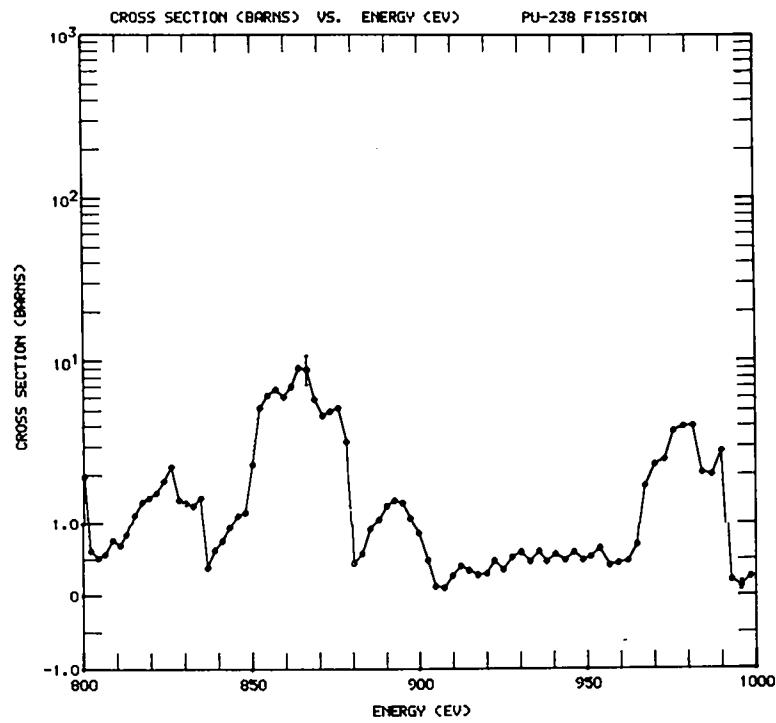


Fig. 10

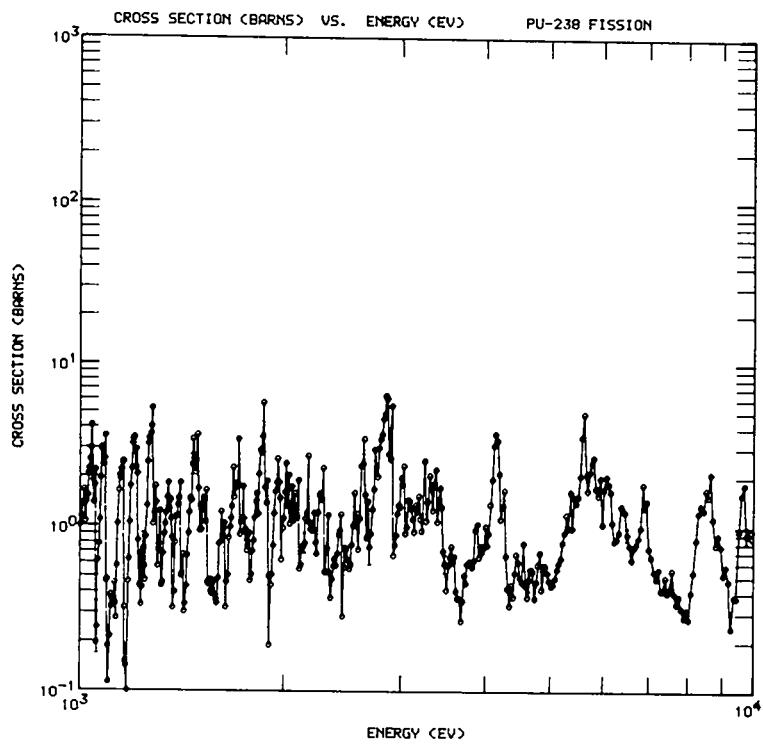


Fig. 11

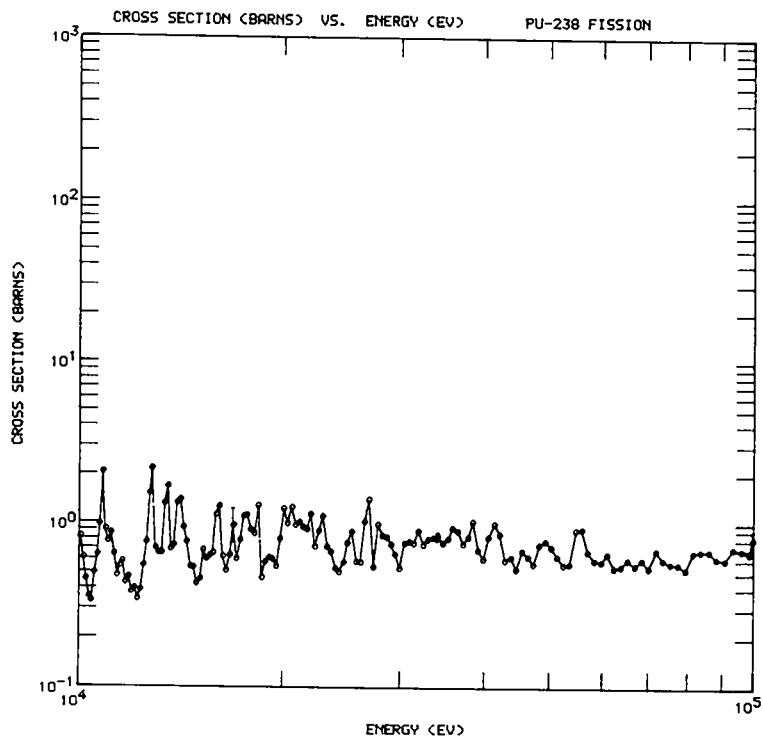


Fig. 12

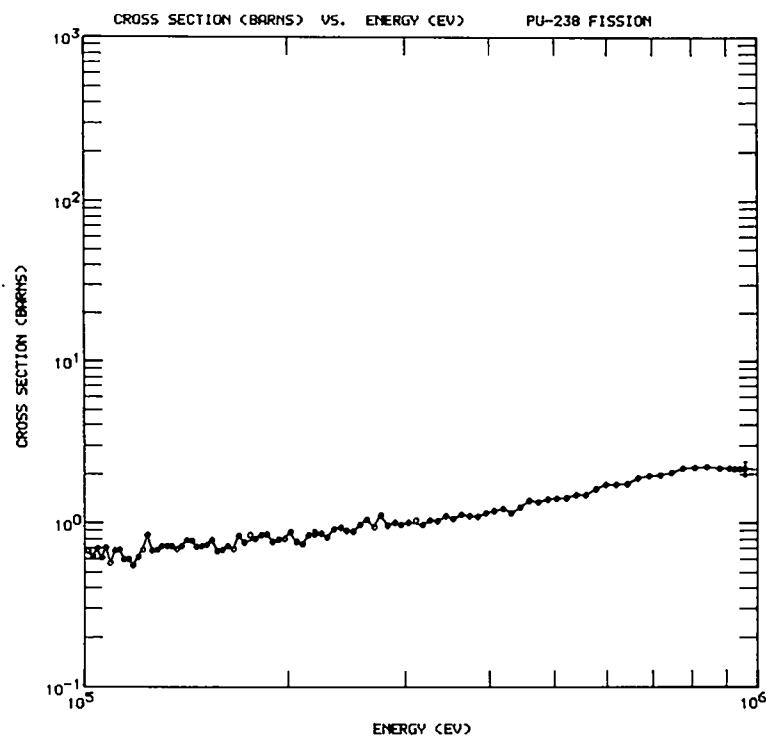


Fig. 13

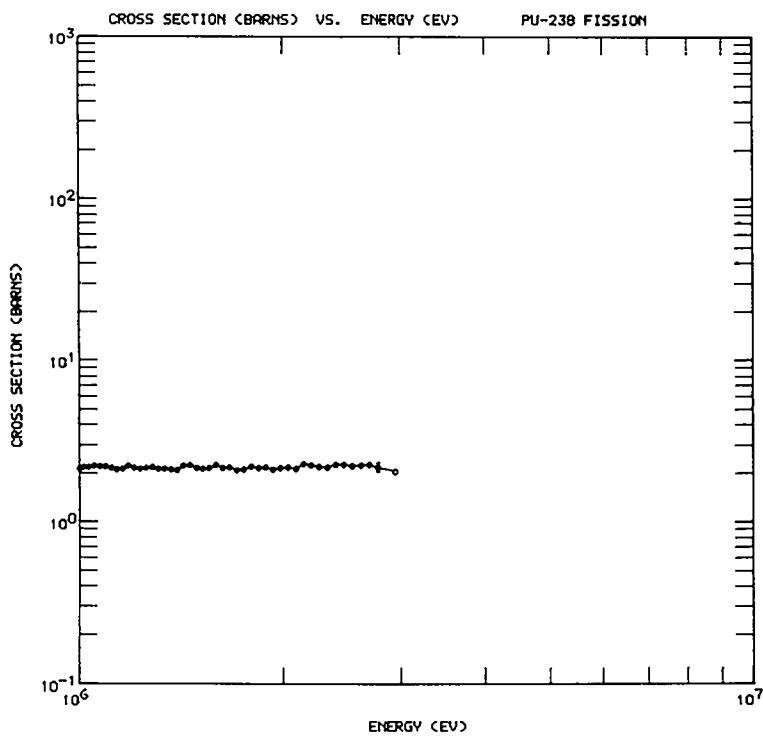


Fig. 14

#### APPENDIX

The  $^{238}\text{Pu}$  fission cross section described in this report is listed below in decreasing order of energy, reading across each page. For each point, the neutron energy, the cross section, and the fractional error are given. The energy and cross section are in floating point notation. For the energy, the decimal point is understood after the first digit. For the cross section, the decimal point is understood before the first digit. The error is expressed as a decimal fraction. Thus, the first point is:

Neutron Energy =  $2.94364 \times 10^5$  eV

Cross Section = 2.0670 b

Error in Cross Section = 8.39%.

It should be emphasized that the errors (standard deviations) combine random and systematic uncertainties. In obtaining integrals, for instance, it is necessary to separate quadratically the systematic part (5.3%), perform the integration with the random errors, and then recombine the systematic error.

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
294364+6	20670+1	0.0839	276779+6	21816+1	0.0855	268571+6	22660+1	0.0810
260723+6	22361+1	0.0747	253214+6	22143+1	0.0804	246025+6	22786+1	0.0875
239138+6	22603+1	0.0818	232536+6	21818+1	0.0821	226203+6	22048+1	0.0785
220126+6	22368+1	0.0698	214290+6	22975+1	0.0752	208684+6	21406+1	0.0880
203294+6	21765+1	0.0755	198111+6	21620+1	0.0909	193123+6	21211+1	0.0899
188321+6	21869+1	0.0867	183696+6	21444+1	0.0790	179240+6	22001+1	0.0839
174628+6	21035+1	0.0614	170496+6	20837+1	0.0946	166508+6	21881+1	0.0727
162659+6	21524+1	0.0541	158941+6	22474+1	0.0676	155350+6	21566+1	0.0695
151878+6	21233+1	0.0854	148522+6	21458+1	0.0905	145276+6	22425+1	0.0679
142135+6	22281+1	0.0687	139095+6	20879+1	0.0744	136152+6	21074+1	0.0749
133300+6	21336+1	0.0729	130538+6	21315+1	0.0663	127860+6	21882+1	0.0655
125264+6	21499+1	0.0674	122746+6	21228+1	0.0645	120304+6	21646+1	0.0770
117933+6	22214+1	0.0883	115632+6	21255+1	0.1096	113398+6	21117+1	0.0956
111227+6	21614+1	0.0741	109119+6	21996+1	0.0693	107070+6	21971+1	0.0786
105078+6	22163+1	0.1010	103141+6	21877+1	0.0737	101257+6	21732+1	0.0788
995453+5	21347+1	0.0695	960195+5	21660+1	0.1115	943265+5	21507+1	0.0943
926778+5	21645+1	0.1040	910719+5	21784+1	0.0941	879829+5	21772+1	0.0800
843377+5	22130+1	0.0557	809144+5	21985+1	0.0938	776954+5	21857+1	0.0744
746646+5	20435+1	0.0908	718077+5	19889+1	0.0910	691117+5	19580+1	0.1087
665646+5	18930+1	0.1012	641558+5	17521+1	0.0921	618754+5	17345+1	0.1134
597144+5	17319+1	0.1025	576646+5	16229+1	0.0974	556615+5	15007+1	0.0948
538151+5	14971+1	0.1147	520591+5	14424+1	0.0834	503876+5	14216+1	0.1107
487953+5	14059+1	0.0975	472773+5	13555+1	0.0841	458290+5	13862+1	0.0663
444463+5	12577+1	0.0909	431252+5	11586+1	0.0909	418621+5	12252+1	0.0878
406536+5	11896+1	0.1083	394968+5	11529+1	0.1318	383886+5	10954+1	0.1676
373264+5	11102+1	0.0876	363076+5	11325+1	0.0807	353300+5	10650+1	0.1007
343913+5	11145+1	0.0865	334896+5	10367+1	0.0851	326228+5	10396+1	0.1149
317893+5	98045+0	0.0923	310624+5	10469+1	0.0380	302876+5	10103+1	0.0626
295413+5	97656+0	0.0662	288223+5	10137+1	0.0660	281293+5	96527+0	0.0822
274609+5	11171+1	0.0885	268160+5	94649+0	0.0706	261936+5	10510+1	0.0677
255926+5	97798+0	0.0677	250120+5	89328+0	0.0682	244510+5	89933+0	0.0669
239086+5	93531+0	0.0644	233841+5	92253+0	0.0681	228766+5	81998+C	0.0764
223855+5	86678+0	0.0663	219100+5	86871+0	0.0698	214495+5	84999+C	0.0673
210033+5	74801+0	0.0567	205710+5	76985+0	0.0766	201518+5	87880+C	0.0554
197453+5	80122+0	0.0742	193510+5	79296+0	0.0718	189684+5	77314+0	0.0708
185969+5	85957+0	0.0727	182363+5	84716+0	0.0704	178861+5	80366+C	0.0722
175456+5	84650+0	0.0525	172150+5	76279+0	0.0692	168936+5	83852+C	0.0721
165812+5	69287+0	0.1027	162773+5	72255+0	0.0775	159817+5	69032+C	0.0784
156941+5	67452+0	0.0688	154142+5	78459+0	0.0799	151417+5	74248+C	0.0701
148763+5	72327+0	0.0732	146179+5	72046+0	0.0740	143661+5	78162+0	0.0840
141208+5	78433+0	0.0700	138817+5	72778+0	0.0690	136486+5	69512+0	0.0785
134214+5	72673+0	0.0708	131997+5	72281+0	0.0872	129835+5	72531+C	0.0782
127726+5	68646+0	0.0971	125668+5	68453+0	0.0866	123659+5	84701+C	0.1081
121698+5	68639+0	0.0711	119783+5	61878+0	0.0929	117913+5	55348+C	0.0703
116086+5	60203+0	0.0773	114301+5	60005+0	0.0876	112557+5	68824+0	0.0719
110853+5	68263+0	0.0985	109187+5	57334+0	0.0737	107559+5	70732+C	0.0711
105966+5	61256+0	0.0745	104409+5	70409+0	0.0697	102886+5	62719+C	0.1139
101395+5	67364+0	0.1055	999374+4	82469+0	0.1119	987129+4	67071+0	0.0579
959407+4	69212+0	0.0776	932837+4	71420+0	0.0897	907354+4	61019+0	0.1152
882901+4	61794+0	0.1201	859422+4	68700+0	0.1050	836867+4	68553+0	0.0866
815188+4	67082+0	0.1540	794340+4	53249+0	0.1043	774281+4	57129+C	0.1047
754972+4	57959+0	0.0931	736375+4	60668+0	0.0865	718457+4	69256+0	0.0917
701184+4	54294+0	0.1378	684526+4	60947+0	0.1245	668455+4	56232+0	0.1070
652942+4	60629+0	0.0858	637963+4	55645+0	0.1178	623493+4	54307+0	0.1359

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
609509+4	66193+0	0.1001	595990+4	58850+0	0.1159	582516+4	60332+C	0.1012
570267+4	68232+0	0.1031	558099+4	93308+0	0.1008	546244+4	92049+C	0.1147
534762+4	57308+0	0.1639	523639+4	56690+0	0.0883	512858+4	63056+C	0.0921
502407+4	72775+0	0.1116	492272+4	78556+0	0.0875	48244C+4	74978+C	0.0805
472899+4	57344+0	0.1415	463639+4	63234+0	0.0825	454647+4	68906+0	0.1306
445914+4	53363+0	0.1228	437430+4	62566+0	0.1316	429186+4	59980+C	0.0930
421173+4	86529+0	0.1794	413381+4	99516+0	0.1059	405804+4	82880+C	0.1255
398433+4	61176+0	0.0981	391260+4	69411+0	0.2053	38428C+4	10309+1	0.0989
378155+4	83079+0	0.0830	371521+4	75578+0	0.0907	365059+4	89868+0	0.1470
358764+4	93590+0	0.0765	352630+4	81630+0	0.1061	346652+4	76169+C	0.0984
340825+4	83476+0	0.0769	335143+4	81969+0	0.1268	329602+4	80308+C	0.0781
324197+4	75042+0	0.0949	318924+4	89977+0	0.1272	313925+4	76651+C	0.0631
308899+4	78349+0	0.1132	303993+4	76507+0	0.1157	299202+4	53740+C	0.1075
294524+4	65395+0	0.1257	289955+4	75077+0	0.1131	285491+4	82541+C	0.0865
281129+4	85050+0	0.1001	276866+4	98672+0	0.1875	272699+4	54951+C	0.1422
268626+4	14027+1	0.1413	264643+4	10278+1	0.2396	260747+4	58178+C	0.1118
256937+4	58806+0	0.1040	253210+4	89662+0	0.0914	249564+4	75976+0	0.0728
245995+4	58355+0	0.0910	242502+4	50746+0	0.1203	239083+4	53636+C	0.2566
235736+4	67572+0	0.1286	232458+4	72178+0	0.0980	229249+4	11139+1	0.1141
226105+4	90078+0	0.1288	223025+4	72660+0	0.1499	220084+4	11433+1	0.1931
217051+4	91766+0	0.1006	214441+4	95051+0	0.0968	211595+4	10181+1	0.0837
208806+4	97604+0	0.1079	206071+4	12610+1	0.1118	203390+4	95648+C	0.1516
200760+4	12275+1	0.2329	198181+4	80668+0	0.1461	195652+4	54823+C	0.1611
193170+4	60504+0	0.0973	190735+4	62268+0	0.1167	188346+4	58569+C	0.1681
186002+4	46687+0	0.1095	183701+4	12856+1	0.4576	181442+4	86268+C	0.1200
179225+4	91492+0	0.1521	177070+4	11164+1	0.0794	174932+4	11075+1	0.1540
172832+4	79149+0	0.1653	170770+4	61084+0	0.1078	168744+4	97294+0	0.2433
166755+4	64344+0	0.1387	164800+4	51226+0	0.1119	162879+4	62686+C	0.2801
160992+4	12662+1	0.1664	159137+4	11379+1	0.1628	157495+4	66096+C	0.2353
155700+4	63426+0	0.1723	153936+4	60583+0	0.1217	152201+4	68614+C	0.2183
150495+4	45899+0	0.2721	148818+4	43385+0	0.1627	147164+4	53896+C	0.1721
145547+4	54270+0	0.1132	143951+4	76188+0	0.1175	142382+4	93677+C	0.1152
140838+4	13992+1	0.1848	139319+4	13361+1	0.1428	137824+4	73412+C	0.1592
136353+4	69475+0	0.1418	134906+4	17018+1	0.2624	133481+4	13181+1	0.1992
132079+4	66195+0	0.1344	130699+4	66144+0	0.1670	129341+4	69968+C	0.3681
128003+4	21681+1	0.1634	126817+4	15236+1	0.1672	125518+4	76721+C	0.1336
124239+4	55538+0	0.1968	122979+4	39374+0	0.1260	121739+4	34493+0	0.1743
120517+4	40344+0	0.2350	119313+4	38005+0	0.1778	118127+4	46928+0	0.1427
116959+4	43733+0	0.2552	115808+4	58148+0	0.1782	114674+4	55010+C	0.1024
113556+4	47982+0	0.1439	112455+4	64856+0	0.0913	111369+4	86585+C	0.1884
110299+4	77307+0	0.1003	109245+4	90945+0	0.1217	108205+4	20651+1	0.1926
107181+4	97944+0	0.1747	106271+4	64225+0	0.1606	105273+4	49596+C	0.1738
104290+4	33171+0	0.1658	103320+4	35265+0	0.1501	102363+4	45348+C	0.2171
101420+4	61413+0	0.1437	100490+4	82438+0	0.1139	995882+3	95908+C	0.0189
977898+3	91161+0	0.1280	969087+3	18304+1	0.3029	960395+3	16007+1	0.1173
951819+3	96361+0	0.1789	943358+3	37585+0	0.1959	935083+3	38564+C	0.1797
926768+3	24534+0	0.2452	918637+3	47976+0	0.1832	910612+3	52588+C	0.1262
902691+3	51930+0	0.2635	894873+3	76884+0	0.1247	887156+3	90502+0	0.2705
879538+3	79124+0	0.1239	872018+3	11268+1	0.2496	865331+3	21335+1	0.1493
857991+3	15518+1	0.1268	850744+3	17050+1	0.2517	843589+3	12876+1	0.1395
836522+3	13702+1	0.1706	829544+3	12356+1	0.1372	822653+3	85007+0	0.1823
815847+3	53502+0	0.1301	809125+3	40773+0	0.2019	802486+3	28010+0	0.1862
795928+3	32001+0	0.1919	789449+3	28488+0	0.2281	783050+3	32485+0	0.1907
776727+3	38451+0	0.1627	770481+3	34568+0	0.1801	764309+3	40029+0	0.2033

## 238 PU(N,F) PERSIMMCN REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
758818+3	55523+0	0.1931	752785+3	42723+0	0.2100	746824+3	40542+0	0.1247
740934+3	49930+0	0.3484	735112+3	42038+0	0.2335	729359+3	41803+0	0.2825
723673+3	56181+0	0.1941	718053+3	49184+0	0.1149	712498+3	54061+0	0.1508
707007+3	66589+0	0.1612	701579+3	74928+0	0.0997	696213+3	14544+1	0.1943
690908+3	13195+1	0.1393	685664+3	18202+1	0.2509	680995+3	10030+1	0.1352
675862+3	86451+0	0.1385	670787+3	79730+0	0.1712	665769+3	75238+0	0.1070
660807+3	63857+0	0.1528	655900+3	77712+0	0.1338	651048+3	91168+C	0.1022
646248+3	12467+1	0.1922	641502+3	12867+1	0.1361	636808+3	13456+1	0.1345
632164+3	93917+0	0.1064	627572+3	85873+0	0.1483	623028+3	82833+0	0.1206
618534+3	10767+1	0.1641	614531+3	16567+1	0.0968	610128+3	18359+1	0.1140
605773+3	20467+1	0.0827	601463+3	17170+1	0.2059	597199+3	10423+1	0.1523
592981+3	19948+1	0.2662	588806+3	15824+1	0.1279	584676+3	17346+1	0.1466
580589+3	26917+1	0.1891	576544+3	25033+1	0.1217	572541+3	21757+1	0.1113
568580+3	16819+1	0.1792	564659+3	21056+1	0.1744	560985+3	49461+1	0.0648
557143+3	35787+1	0.1084	553339+3	20636+1	0.1937	549575+3	15475+1	0.1184
545848+3	14138+1	0.1752	542160+3	15308+1	0.1104	538872+3	98850+C	0.2085
535253+3	16437+1	0.2054	531671+3	98526+0	0.1375	528124+3	11876+1	0.0957
524613+3	93431+0	0.1449	521136+3	81652+0	0.1268	517694+3	65345+0	0.1297
514286+3	60955+0	0.1588	510911+3	56064+0	0.118C	507569+3	49174+C	0.1694
504260+3	45034+0	0.1622	500982+3	44363+0	0.2026	497737+3	47726+0	0.1139
494843+3	52965+0	0.2662	491657+3	58480+0	0.1388	488501+3	59206+C	0.1876
485376+3	42387+0	0.1780	482280+3	70365+0	0.188C	479214+3	59438+0	0.1497
476177+3	47072+0	0.1773	473169+3	37239+0	0.1842	470189+3	54089+0	0.2360
467236+3	55933+0	0.1800	464312+3	48271+0	0.1647	461703+3	37966+0	0.2135
458830+3	44999+0	0.1836	455984+3	80116+0	0.2458	453164+3	46882+C	0.1532
450370+3	49821+0	0.1796	447602+3	62365+0	0.1406	444859+3	68551+C	0.2423
442141+3	52878+0	0.1650	439448+3	38298+0	0.1962	436779+3	44969+0	0.1505
434135+3	33761+0	0.2136	431514+3	43096+0	0.1478	429175+3	67432+C	0.2791
426599+3	16753+1	0.1889	424046+3	13555+1	0.1924	421516+3	11224+1	0.1432
419008+3	21362+1	0.2191	416523+3	33943+1	0.1342	414C59+3	37276+1	0.1191
411617+3	31511+1	0.1249	409197+3	19716+1	0.2571	406798+3	13762+1	0.2226
404420+3	92506+0	0.1876	402297+3	77881+0	0.2097	399958+3	1C070+1	0.4032
397639+3	75274+0	0.3560	395341+3	70921+0	0.1527	393C62+3	77511+0	0.1621
390802+3	65752+0	0.1699	388562+3	10440+1	0.1872	386342+3	96623+0	0.1531
384140+3	63012+0	0.1946	381956+3	57494+0	0.1792	380007+3	6C111+C	0.1398
377859+3	61953+0	0.1718	375729+3	60062+0	0.1803	373617+3	46C91+C	0.1647
371522+3	51635+0	0.2954	369445+3	35738+0	0.1922	367385+3	26962+0	0.1524
365343+3	37307+0	0.2170	363317+3	37244+0	0.1633	361308+3	41266+C	0.2300
359316+3	66822+0	0.3100	357537+3	61935+0	0.2532	355575+3	76235+C	0.1495
353630+3	66536+0	0.2102	351700+3	59215+0	0.1937	349786+3	41964+C	0.2030
347888+3	60302+0	0.1340	346005+3	71568+0	0.1226	344137+3	13251+1	0.1267
342285+3	17337+1	0.2215	340447+3	13827+1	0.1124	338805+3	1C743+1	0.1739
336995+3	22445+1	0.2228	335199+3	18450+1	0.199C	333418+3	12666+1	0.1666
331651+3	17342+1	0.1680	329897+3	20607+1	0.2135	328158+3	14449+1	0.1280
326432+3	10832+1	0.1386	324720+3	25375+1	0.2449	321503+3	95141+0	0.2930
319829+3	11184+1	0.1362	318168+3	15451+1	0.2269	316520+3	12446+1	0.1647
314838+3	13706+1	0.0895	313215+3	94288+0	0.1619	311766+3	11184+1	0.2350
310167+3	12902+1	0.1820	308581+3	14398+1	0.1424	307006+3	14655+1	0.2000
305444+3	10007+1	0.1162	303893+3	92309+0	0.1602	302354+3	23742+1	0.2464
300827+3	18094+1	0.1208	299311+3	20100+1	0.3234	297807+3	13225+1	0.1553
296462+3	13621+1	0.2463	294979+3	12005+1	0.2047	293507+3	89202+C	0.1249
292046+3	77644+0	0.1123	290596+3	67275+0	0.1817	289156+3	55274+1	0.2677
287727+3	26000+1	0.1136	286309+3	27859+1	0.1533	284901+3	61334+1	0.4040
283643+3	64011+1	0.1315	282254+3	49648+1	0.1185	280876+3	4570C+1	0.0880

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
279508+3	36765+1	0.1136	278149+3	34371+1	0.1025	276801+3	30463+1	0.1360
275462+3	20331+1	0.1706	272813+3	29570+1	0.2129	271634+3	17021+1	0.1597
270332+3	12829+1	0.1633	269040+3	91071+0	0.1495	267757+3	75453+0	0.2431
266483+3	14405+1	0.2417	265218+3	86885+0	0.1651	263962+3	15811+1	0.2781
262714+3	34604+1	0.3301	261476+3	24460+1	0.2083	260369+3	23696+1	0.0913
259147+3	11199+1	0.1352	257934+3	73299+0	0.1428	256729+3	12049+1	0.2242
255532+3	10200+1	0.1210	254344+3	16138+1	0.1881	253164+3	10214+1	0.2189
251992+3	77758+0	0.3558	250944+3	59672+0	0.1762	249788+3	55981+0	0.2225
248639+3	63389+0	0.1739	247498+3	73321+0	0.1421	246365+3	74924+0	0.1783
245240+3	57186+0	0.2601	244123+3	28889+0	0.1757	243013+3	11953+1	0.3187
241910+3	95025+0	0.1792	240924+3	90312+0	0.1500	239836+3	69104+0	0.1608
238755+3	58326+0	0.1428	237681+3	63763+0	0.2079	236615+3	58179+0	0.1578
235555+3	48218+0	0.2147	234503+3	37235+0	0.1694	233457+3	52990+0	0.1949
232522+3	11857+1	0.2015	231490+3	73643+0	0.2488	230465+3	53713+0	0.1704
229446+3	53719+0	0.2220	228434+3	22913+1	0.1450	227429+3	14727+1	0.1724
226430+3	15904+1	0.1385	225438+3	15621+1	0.1763	224551+3	12125+1	0.1238
223571+3	68843+0	0.2913	222597+3	80768+0	0.1878	221630+3	12122+1	0.3431
220669+3	96910+0	0.1897	219715+3	95279+0	0.1829	218766+3	97235+0	0.2133
217824+3	10666+1	0.4296	216980+3	27176+1	0.2526	216049+3	12144+1	0.0911
215124+3	11241+1	0.1023	214205+3	79760+0	0.1482	213292+3	77303+0	0.1086
212384+3	74577+0	0.1787	211483+3	59097+0	0.1331	210586+3	55741+0	0.3831
209785+3	19205+1	0.2635	208899+3	11494+1	0.1109	208020+3	11782+1	0.2033
207145+3	15986+1	0.1979	206277+3	10867+1	0.1072	205413+3	17527+1	0.1676
204555+3	12257+1	0.1471	203703+3	10427+1	0.1737	202940+3	20763+1	0.1316
202097+3	13309+1	0.1901	201260+3	24308+1	0.1972	200427+3	16354+1	0.1593
199600+3	11172+1	0.1328	198778+3	98378+0	0.3186	197961+3	63233+0	0.2825
197230+3	15003+1	0.2550	196423+3	18681+1	0.2983	195620+3	25947+1	0.2009
194822+3	18617+1	0.1321	194029+3	16493+1	0.1039	193241+3	12039+1	0.1022
192458+3	77283+0	0.1965	191679+3	51443+0	0.2684	190983+3	44334+0	0.3800
190213+3	19287+0	0.2826	189448+3	50202+0	0.6137	188688+3	19104+1	0.1432
187932+3	13999+1	0.1245	187180+3	17410+1	0.1280	186433+3	57510+1	0.2043
185765+3	35829+1	0.0868	185026+3	28183+1	0.1426	184292+3	29307+1	0.1631
183562+3	20826+1	0.2388	182837+3	11936+1	0.1789	182115+3	15983+1	0.2564
181398+3	14193+1	0.1293	180686+3	11349+1	0.1586	180048+3	82067+0	0.1466
179343+3	71346+0	0.1557	178642+3	51641+0	0.2586	177945+3	47513+0	0.2647
177239+3	91487+0	0.2426	176619+3	76744+0	0.4163	175934+3	71403+0	0.2974
175253+3	95850+0	0.1649	174576+3	93459+0	0.1679	173903+3	17426+1	0.2067
173233+3	11157+1	0.2749	172568+3	10680+1	0.2095	171972+3	90563+0	0.1270
171314+3	34486+1	0.2791	170659+3	18109+1	0.1271	170008+3	18270+1	0.0931
169361+3	17228+1	0.1283	168718+3	15082+1	0.0928	168078+3	22813+1	0.1984
167442+3	13220+1	0.0952	166872+3	11183+1	0.1186	166243+3	98502+0	0.1400
165617+3	85759+0	0.2930	164995+3	51181+0	0.3699	164376+3	46502+0	0.2242
163760+3	32634+0	0.1511	163209+3	10469+1	0.2034	162601+3	96624+0	0.1852
161995+3	87872+0	0.1820	161393+3	12250+1	0.1585	160794+3	80498+0	0.1071
160198+3	78901+0	0.1422	159606+3	48930+0	0.1851	159076+3	34334+0	0.2171
158490+3	36202+0	0.3293	157907+3	38563+0	0.1939	157327+3	46452+0	0.2099
156751+3	46866+0	0.2862	156177+3	39431+0	0.3015	155607+3	41087+0	0.3052
155097+3	48049+0	0.3477	154532+3	44956+0	0.1832	153971+3	46492+0	0.2204
153413+3	16556+1	0.2108	152857+3	10671+1	0.1275	152305+3	14538+1	0.1678
151756+3	14909+1	0.1145	151264+3	13464+1	0.1431	150720+3	95007+0	0.1222
150179+3	13352+1	0.2817	149642+3	95253+0	0.1489	149106+3	17022+1	0.3339
148574+3	36466+1	0.1974	148098+3	25296+1	0.1926	147571+3	21412+1	0.1470
147047+3	26067+1	0.2529	146526+3	34347+1	0.1695	146007+3	23923+1	0.1508
145491+3	14352+1	0.1232	144978+3	14833+1	0.1026	144519+3	12180+1	0.1562

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
144011+3	91541+0	0.1900	143505+3	66528+0	0.2676	143C03+3	43390+0	0.3837
142503+3	34060+0	0.3243	142005+3	30532+0	0.4110	141560+3	67235+0	0.2199
141067+3	51988+0	0.2019	140577+3	50302+0	0.1479	140C90+3	18534+1	0.2855
139605+3	14838+1	0.1054	139122+3	13531+1	0.1327	138642+3	11574+1	0.0959
138212+3	11491+1	0.1274	137737+3	79969+0	0.1212	137264+3	4C195+0	0.2519
136794+3	32228+0	0.2435	136326+3	85980+0	0.2690	135860+3	11131+1	0.1334
135443+3	14526+1	0.1347	134982+3	12671+1	0.1258	134523+3	18526+1	0.1583
134066+3	14909+1	0.1007	133612+3	12006+1	0.1296	133160+3	10269+1	0.1072
132755+3	90166+0	0.1238	132308+3	68136+0	0.1342	131862+3	45842+0	0.2530
131419+3	43843+0	0.3047	130978+3	12439+1	0.2555	130540+3	77751+C	0.2243
130103+3	72209+0	0.1500	129712+3	57934+0	0.1799	129280+3	14002+1	0.1774
128849+3	17595+1	0.2110	128421+3	12114+1	0.1084	127995+3	1C340+1	0.1366
127571+3	53321+1	0.3252	127192+3	40918+1	0.1243	126772+3	37111+1	0.1226
126354+3	34719+1	0.0916	125938+3	31857+1	0.1136	125524+3	24543+1	0.1239
125112+3	13321+1	0.1451	124743+3	86843+0	0.1545	124335+3	47205+C	0.2198
123929+3	57129+0	0.1997	123525+3	73597+0	0.2304	123123+3	42693+0	0.3352
122723+3	33515+0	0.1866	122365+3	68346+0	0.2303	121968+3	44202+C	0.1866
121574+3	82115+0	0.5320	121181+3	20840+1	0.1598	120791+3	29536+1	0.2259
120402+3	22801+1	0.1235	120053+3	35153+1	0.1467	119668+3	34157+1	0.1285
119284+3	31819+1	0.1155	118903+3	22353+1	0.1163	118523+3	17523+1	0.1490
118145+3	10533+1	0.3485	117806+3	63609+0	0.1672	117432+3	46349+C	0.2529
117059+3	99872-1	0.4887	116688+3	14226+0	0.3C91	116318+3	15199+C	0.4613
115951+3	32163+0	0.5075	115621+3	24702+1	0.3597	115257+3	24710+1	0.1929
114894+3	22274+1	0.1104	114533+3	19361+1	0.1250	114174+3	2C436+1	0.1245
113852+3	16531+1	0.1406	113496+3	10313+1	0.1733	113142+3	57976+C	0.3051
112789+3	27802+0	0.1888	112438+3	34137+0	0.1847	112C88+3	45298+C	0.2643
111775+3	35652+0	0.4564	111429+3	36746+0	0.2224	111C84+3	32690+0	0.2300
110741+3	38415+0	0.2202	110399+3	21472+0	0.2865	110C59+3	11360+C	0.3747
109754+3	18831+0	0.3418	109417+3	48C02+0	0.1956	1C9C81+3	46702+C	0.1881
108747+3	35916+1	0.1893	108415+3	25570+1	0.1483	1C8117+3	23702+1	0.1143
107787+3	30465+1	0.0928	107459+3	29556+1	0.1053	1C7132+3	19600+1	0.1154
106807+3	10821+1	0.1702	106483+3	78227+0	0.2223	1C6193+3	61825+C	0.4261
105872+3	24401+0	0.3666	105552+3	19633+0	0.3339	1C5234+3	21898+1	0.2126
104918+3	17631+1	0.1852	104602+3	14004+1	0.1217	1C4320+3	19033+1	0.2005
104007+3	41570+1	0.1347	103696+3	29617+1	0.1222	1C3386+3	25509+1	0.1009
103078+3	22408+1	0.0953	102801+3	20946+1	0.0942	1C2495+3	15264+1	0.1100
102191+3	14045+1	0.1287	101888+3	10662+1	0.1080	1C1586+3	13860+1	0.1332
101285+3	16639+1	0.1536	101016+3	13479+1	0.0919	1C0718+3	13593+1	0.1159
100422+3	11399+1	0.1198	100126+3	10080+1	0.1184	998674+2	27096+C	0.1469
995745+2	13972+0	0.4645	992828+2	21902+0	0.2803	989924+2	28292+1	0.2009
987033+2	20084+1	0.0826	984154+2	20687+1	0.1091	981574+2	4C167+1	0.1719
978719+2	39933+1	0.0917	975876+2	37430+1	0.1C75	973C46+2	24928+1	0.1087
970227+2	23175+1	0.0825	967421+2	17130+1	0.1515	964906+2	7C280+C	0.2148
962123+2	48194+0	0.2144	959352+2	44704+0	0.4071	956592+2	41901+0	0.2466
953845+2	65015+0	0.1563	951109+2	54074+0	0.1209	948657+2	48548+0	0.1102
945943+2	60053+0	0.1380	943241+2	49043+0	0.1306	940550+2	56918+C	0.1760
937871+2	47282+0	0.1125	935469+2	61332+0	0.3988	932811+2	46516+C	0.1571
930165+2	59992+0	0.1822	927529+2	53147+0	0.1882	924905+2	36255+C	0.1839
922292+2	47528+0	0.1663	919948+2	30883+0	0.2174	917347+2	28617+C	0.1701
914750+2	34807+0	0.1548	912157+2	40613+0	0.1661	9C9827+2	27911+0	0.4325
907241+2	11536+0	0.4115	904658+2	13360+0	0.3979	902338+2	49345+0	0.6079
899762+2	86400+0	0.1179	897191+2	10710+1	0.2234	894880+2	13352+1	0.1531
892316+2	13730+1	0.0909	890011+2	12774+1	0.1928	887454+2	1C559+1	0.1719
885156+2	92779+0	0.1981	882606+2	58378+0	0.1126	880314+2	45157+C	0.1710

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
878026+2	32230+1	0.4482	875486+2	51789+1	0.1538	873204+2	49347+1	0.0823
870925+2	46193+1	0.0945	868396+2	58647+1	0.0735	866123+2	88879+1	0.2103
863853+2	91546+1	0.1568	861586+2	70278+1	0.0847	859323+2	61002+1	0.0875
856811+2	67720+1	0.0680	854554+2	61911+1	0.0741	852299+2	51903+1	0.1100
850048+2	23132+1	0.1194	847800+2	11640+1	0.1223	845555+2	11088+1	0.1045
843313+2	94739+0	0.1347	841074+2	75370+0	0.1367	838838+2	63236+0	0.2458
836605+2	39199+0	0.2464	834375+2	14405+1	0.1623	832148+2	12882+1	0.1262
829924+2	13418+1	0.0919	827950+2	13928+1	0.1129	825732+2	22394+1	0.1839
823517+2	18445+1	0.1224	821305+2	15469+1	0.1477	819095+2	14317+1	0.0965
817134+2	13498+1	0.0788	814931+2	11162+1	0.0905	812731+2	84405+C	0.1682
810778+2	69467+0	0.1765	808583+2	76276+0	0.2246	806392+2	56962+C	0.1555
804446+2	52411+0	0.1164	802260+2	61670+0	0.1156	800320+2	19634+1	0.3234
798140+2	25393+1	0.2179	796205+2	22605+1	0.0955	794030+2	21537+1	0.1085
792100+2	24957+1	0.0707	789932+2	22666+1	0.083C	78807+2	18002+1	0.1428
785844+2	94808+1	0.2081	783924+2	81591+1	0.1009	78206+2	91595+1	0.0724
779852+2	94561+1	0.0714	777939+2	10396+2	0.0634	776029+2	83965+1	0.0902
773883+2	55897+1	0.1949	771978+2	22563+1	0.1816	770076+2	12241+1	0.1215
768175+2	81872+0	0.1474	766041+2	60505+0	0.1015	764145+2	45429+C	0.1647
762253+2	46756+0	0.1672	760362+2	39778+0	0.1624	758474+2	27311+C	0.2054
756589+2	20744+0	0.1840	754705+2	29793+0	0.2437	752825+2	18420+0	0.2655
750946+2	19056+0	0.2548	749070+2	25301+0	0.2027	747197+2	27274+C	0.1357
745325+2	29781+0	0.2368	743457+2	66898+0	0.2979	741590+2	15437+1	0.1305
739726+2	14691+1	0.1032	737864+2	13558+1	0.0941	73605+2	17493+1	0.0745
734148+2	13853+1	0.1005	732294+2	10643+1	0.1271	730673+2	42836+C	0.2255
728823+2	25966+0	0.1888	726975+2	23545+0	0.1314	725130+2	23990+C	0.2394
723518+2	22032+0	0.2345	721677+2	29768+0	0.1932	719839+2	67952+C	0.3410
718003+2	44803+1	0.1194	716398+2	37117+1	0.0999	714567+2	41754+1	0.0798
712737+2	16350+2	0.3783	711139+2	25302+2	0.1195	709314+2	23732+2	0.0733
707720+2	22306+2	0.0679	705900+2	24252+2	0.0637	704309+2	22684+2	0.0666
702493+2	15431+2	0.1437	700906+2	72458+1	0.1300	699095+2	59219+1	0.1230
697512+2	40189+1	0.1004	695706+2	29994+1	0.0897	694127+2	33700+1	0.0860
692324+2	33517+1	0.0863	690749+2	26685+1	0.1120	689176+2	23827+1	0.1161
687381+2	14657+1	0.1251	685811+2	12811+1	0.0970	684244+2	96491+C	0.1714
682455+2	58277+0	0.1683	680891+2	50413+0	0.1716	679329+2	4C276+0	0.3215
677547+2	28393+0	0.2238	675989+2	24229+0	0.2182	674433+2	2C724+C	0.2204
672879+2	19352+0	0.1720	671327+2	22272+0	0.2412	669555+2	68691+1	0.2347
668006+2	61474+1	0.1299	666460+2	67906+1	0.0704	664915+2	7C058+1	0.0931
663372+2	81216+1	0.0670	661831+2	74482+1	0.0840	660292+2	45964+1	0.1555
658754+2	23098+1	0.2406	657219+2	13520+1	0.1402	655685+2	71560+C	0.1987
654153+2	46685+0	0.1739	652623+2	32242+0	0.1256	651095+2	2C340+C	0.1668
649568+2	21181+0	0.1693	648043+2	18829+0	0.3982	646520+2	21265+C	0.3242
644999+2	16655+0	0.2344	643480+2	88961+0	0.4128	641963+2	38828+1	0.1566
640447+2	35373+1	0.1052	638934+2	40745+1	0.0824	637637+2	46641+1	0.0826
636127+2	53675+1	0.1345	634619+2	67566+1	0.1337	633112+2	47193+1	0.0787
631607+2	40801+1	0.0709	630319+2	43609+1	0.083C	628817+2	39727+1	0.0899
627317+2	30802+1	0.1610	625819+2	13869+1	0.1998	624537+2	53287+0	0.1630
623042+2	36066+0	0.1688	621550+2	28993+0	0.1393	620272+2	21735+C	0.2012
618783+2	20165+0	0.1951	617507+2	99643-1	0.3609	616022+2	14906+0	0.5921
614537+2	14396+0	0.2185	613267+2	35590+0	0.2600	611786+2	56483+C	0.1933
610518+2	70825+0	0.1170	609041+2	65496+0	0.1425	607776+2	79565+0	0.1232
606302+2	81340+0	0.1176	605040+2	59916+0	0.1868	603570+2	37483+0	0.1929
602311+2	38327+0	0.1533	600844+2	38151+0	0.1473	599588+2	17963+1	0.3455
598124+2	25052+1	0.1281	596871+2	27037+1	0.0764	595619+2	27574+1	0.1051
594160+2	30665+1	0.0840	592911+2	30252+1	0.0805	591663+2	31267+1	0.1615

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
590209+2	33693+1	0.1240	588965+2	34819+1	0.0873	587721+2	35048+1	0.0763
586272+2	35527+1	0.0772	585032+2	32577+1	0.0857	583792+2	23872+1	0.1637
582555+2	13449+1	0.1490	581112+2	95571+0	0.1316	579877+2	62237+C	0.1703
578644+2	58554+0	0.1148	577411+2	49274+0	0.1356	57618C+2	36865+0	0.3443
574746+2	10757+0	0.6505	573518+2	84392-3162.0810		572291+2	21787+C	0.3262
571066+2	16303+0	0.2333	569842+2	24948+0	0.3213	568619+2	22258+0	0.1967
567398+2	24020+0	0.1948	566178+2	21683+0	0.2215	564756+2	18832+C	0.2153
563539+2	19883-2	32.7682	562323+2	-15512+0	0.3488	561226+2	67606-1	0.6934
560013+2	98874-1	0.5114	558801+2	97497-1	0.4421	557590+2	14197+0	0.3060
556381+2	34921+0	0.2611	555173+2	27194+0	0.2085	553967+2	39441+C	0.2573
552761+2	54037+0	0.2089	551557+2	58794+0	0.1149	550355+2	65359+C	0.1160
549153+2	63822+0	0.1630	547954+2	50716+0	0.1324	546955+2	33598+0	0.1850
545757+2	20473+0	0.2572	544561+2	23816+0	0.2131	543366+2	69898+C	0.4108
542173+2	69728+0	0.2643	540981+2	86847+0	0.0937	539988+2	1C396+1	0.1347
538799+2	12086+1	0.0856	537610+2	11C03+1	0.1250	536423+2	68094+0	0.1794
535435+2	36652+0	0.4180	534250+2	17309+0	0.3103	533C67+2	84610-1	0.6325
531885+2	94303-1	0.7761	530901+2	-50569-1	1.90C7	529722+2	-68379-1	0.8283
528544+2	11480+0	0.8418	527563+2	15C18+0	0.4249	526387+2	31530-1	1.8425
525213+2	25342-2	23.4028	524235+2	55728+0	0.3930	523C63+2	67506+0	0.1440
522088+2	84643+0	0.1237	520918+2	11174+1	0.3406	51975C+2	62012+1	0.1665
518778+2	62274+1	0.0792	517612+2	74136+1	0.0691	516641+2	75797+1	0.0683
515478+2	80193+1	0.0708	514510+2	69864+1	0.0970	513349+2	47420+1	0.1629
512383+2	32659+1	0.2707	511224+2	11114+1	0.1827	510260+2	62040+0	0.3282
509104+2	43232+0	0.3824	508142+2	38480+0	0.22C7	5C6988+2	31143+C	0.2005
506028+2	18121+0	0.1932	504877+2	75973-1	0.5777	5C3919+2	36547-1	0.8222
502961+2	39612-1	0.7957	501814+2	74179-2	3.7356	5C0859+2	-38553-1	0.7214
499714+2	17694-1	1.6023	498760+2	31901+0	0.4422	497808+2	14104+1	0.1237
496667+2	14230+1	0.1341	495716+2	15376+1	0.0915	494767+2	16173+1	0.0880
493819+2	16562+1	0.1258	492682+2	13105+1	0.1397	491735+2	7211C+C	0.2157
490790+2	25980+0	0.4323	489657+2	78223-1	1.6721	488713+2	-38314+C	0.5297
487771+2	-32046+0	0.3796	486829+2	-28356+0	0.312C	485701+2	-21198+C	0.4859
484761+2	-24910+0	0.3708	483822+2	-22172+0	0.3819	482885+2	-17446+0	0.5075
481948+2	-24709+0	0.2948	481012+2	-20818+0	0.2747	479890+2	-2C121+C	0.2295
478957+2	-21681+0	0.1992	478024+2	-14754+0	0.2874	477C92+2	-12922+C	0.3937
476161+2	59798-1	2.6065	475231+2	11439+1	0.1729	474301+2	12404+1	0.1195
473373+2	16006+1	0.0920	472260+2	14320+1	0.1180	471334+2	12701+1	0.1225
470409+2	11165+1	0.0994	469485+2	86928+0	0.2689	468561+2	76824+0	0.2501
467639+2	49554+1	0.1551	466717+2	61157+1	0.1299	465796+2	77462+1	0.0896
464876+2	75193+1	0.0772	463958+2	75411+1	0.0732	463C40+2	77939+1	0.0734
462123+2	72605+1	0.0915	461207+2	71222+1	0.0721	460291+2	61171+1	0.0700
459377+2	55440+1	0.0926	458647+2	42220+1	0.1123	457734+2	26835+1	0.1661
456822+2	16108+1	0.1193	455912+2	96653+0	0.1128	455C02+2	62148+C	0.1708
454093+2	37695+0	0.1454	453185+2	36283+0	0.1487	452278+2	36025+0	0.1869
451372+2	26331+1	0.3053	450648+2	49416+1	0.C9C5	449743+2	64177+1	0.0778
448840+2	68776+1	0.0731	447937+2	65257+1	0.0823	447C36+2	61303+1	0.0863
446315+2	42301+1	0.1504	445415+2	23856+1	0.1492	444516+2	13778+1	0.1351
443618+2	80651+0	0.1237	442721+2	39645+0	0.1689	442C04+2	2C066+C	0.2595
441108+2	16564+0	0.2955	440213+2	13421+0	0.3362	43932C+2	1C393+0	0.3060
438605+2	-53761-1	1.5564	437713+2	-94518-1	0.9103	436822+2	-13795+0	0.3385
436110+2	-37772-1	1.7205	435220+2	-70980-1	0.7693	434332+2	72217-1	0.6980
433622+2	17648+0	0.2432	432735+2	26601+0	0.1873	431849+2	26033+0	0.1841
431141+2	22333+0	0.2675	430256+2	34439+0	0.1401	429373+2	32674+1	0.3695
428667+2	77423+1	0.0945	427785+2	10424+2	0.0781	427C80+2	11218+2	0.0786
426200+2	11256+2	0.0727	425497+2	10671+2	0.0774	424618+2	85515+1	0.1169

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRGR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
423741+2	49254+1	0.1507	423039+2	29247+1	0.0976	422164+2	49978+1	0.3914
421463+2	17716+2	0.0994	420589+2	22461+2	0.0958	419891+2	26090+2	0.0776
419018+2	24622+2	0.0667	418321+2	24972+2	0.0688	417450+2	20484+2	0.0990
416754+2	10806+2	0.1767	415884+2	52726+1	0.1286	415190+2	26046+1	0.1166
414322+2	18180+1	0.1611	413629+2	10102+1	0.1074	412763+2	51291+0	0.2046
412071+2	30084+0	0.2533	411379+2	33502+0	0.2592	410516+2	95336+C	0.1333
409826+2	14555+1	0.2292	408964+2	19635+1	0.0858	408275+2	15936+1	0.1100
407587+2	15149+1	0.0905	406727+2	13215+1	0.1306	406040+2	1C047+1	0.1559
405354+2	70947+0	0.1131	404497+2	37086+0	0.2690	403812+2	14908+0	0.5370
402957+2	32387+0	0.2667	402273+2	17970+0	0.2893	401590+2	-73800-1	1.1645
400907+2	-51823-1	0.9636	400055+2	37073-1	0.9264	399374+2	-16579+0	0.2252
398693+2	-53926-1	0.6362	397843+2	-54340-1	0.7031	397164+2	-15450+C	0.2451
396485+2	-11627+0	0.3270	395807+2	-10393+0	0.3719	394961+2	-96041-1	0.4268
394284+2	-16257+0	0.3684	393608+2	30738+0	0.2981	392932+2	79155+C	0.1285
392088+2	14497+1	0.1440	391414+2	16176+1	0.1033	390740+2	16786+1	0.0886
390067+2	16776+1	0.1197	389395+2	12739+1	0.1991	388555+2	75080+C	0.1746
387884+2	46390+0	0.1417	387213+2	19572+0	0.2436	386543+2	12523+0	0.3121
385874+2	15438-1	5.2758	385205+2	15258+0	0.3848	384370+2	22355+0	0.2939
383702+2	36382+0	0.1920	383036+2	33126+0	0.1807	382369+2	36973+C	0.1708
381703+2	32448+0	0.1835	381038+2	32194+0	0.2700	380374+2	-56564-1	1.5071
379710+2	-13500+0	0.3699	379046+2	-15957-2	54.4979	378384+2	-37615-1	2.5729
377556+2	11841+0	1.5701	376895+2	-12389+0	0.7210	376234+2	-14395+C	0.6300
375573+2	-19461+0	0.4645	374914+2	-28047+0	0.3369	374255+2	-24731+C	0.3917
373596+2	-17358+0	0.4349	372938+2	-19758+0	0.4598	372281+2	58223-2	9.7656
371624+2	-10553+0	1.0002	370968+2	29224-1	1.1356	370312+2	16917+1	0.3168
369657+2	27130+1	0.0945	369003+2	36194+1	0.0940	368349+2	36370+1	0.0795
367696+2	35577+1	0.0593	367043+2	32720+1	0.1216	366391+2	21419+1	0.1220
365740+2	14547+1	0.1599	365251+2	60279+0	0.2160	364601+2	55190+C	0.1915
363951+2	20840+0	0.3488	363302+2	10588+C	0.2905	362653+2	28392+C	0.2261
362005+2	35202+0	0.1876	361358+2	47979+0	0.1271	360711+2	35323+C	0.1782
360064+2	28236+0	0.1914	359419+2	32928+0	0.1725	358935+2	25825+0	0.2919
358290+2	11701+0	0.2911	357646+2	19716+0	0.4689	357C02+2	11149+C	0.3115
356359+2	12422+0	0.5252	355717+2	78269-1	0.4768	355236+2	16181+C	0.6312
354594+2	26849-1	2.5226	353954+2	-28531-1	1.3965	353313+2	39286-1	0.9396
352674+2	-10929+0	0.5911	352194+2	-96325-1	0.5606	351556+2	1C312+0	0.4501
350918+2	77211-1	0.8510	350281+2	-88467-1	0.6864	349644+2	-32177-1	1.6229
349167+2	69017-1	0.7117	348531+2	-15129-1	4.6508	347896+2	-67960-1	1.0853
347261+2	-12210+0	0.3979	346785+2	-13167+0	0.1547	346152+2	-73246-1	0.4680
345519+2	-82134-2	7.4387	345045+2	10166+0	0.5746	344413+2	61047-1	0.9283
343781+2	-14904+0	0.2587	343151+2	-26455+0	0.2623	342678+2	-94904-1	0.7081
342048+2	-10940+0	0.2566	341419+2	-13078+0	0.3095	340547+2	-15098+C	0.3840
340319+2	-15138-2	25.9361	339692+2	14050-1	3.1660	339221+2	85126-1	0.6218
338595+2	27907+1	0.3476	337969+2	53966+1	0.0955	337500+2	74032+1	0.0987
336875+2	76306+1	0.0820	336407+2	75686+1	0.0833	335783+2	71619+1	0.0683
335160+2	54546+1	0.1367	334693+2	31644+1	0.1203	334C70+2	2C305+1	0.1716
333449+2	12010+1	0.1903	332983+2	61957+0	0.2820	332362+2	45387+C	0.1909
331897+2	33673+0	0.1929	331277+2	27659+0	0.1947	330813+2	17809+C	0.3132
330194+2	16139+0	0.3286	329576+2	13881+0	0.3738	329113+2	37952+0	0.2964
328496+2	22154+1	0.3690	328034+2	12244+2	0.1475	327418+2	17512+2	0.0935
326956+2	20147+2	0.0670	326341+2	18560+2	0.0861	325881+2	17670+2	0.0699
325267+2	14990+2	0.0923	324807+2	89588+1	0.1757	324194+2	5C741+1	0.0943
323735+2	32498+1	0.2132	323123+2	20463+1	0.1265	322664+2	27396+1	0.1395
322053+2	80808+1	0.1368	321596+2	12321+2	0.0896	320986+2	16455+2	0.0704
320529+2	16667+2	0.0715	320072+2	16184+2	0.0680	319464+2	13642+2	0.0784

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
319008+2	89621+1	0.1219	318401+2	69444+1	0.1488	317946+2	41964+1	0.0828
317339+2	30025+1	0.1091	316885+2	22090+1	0.2229	316431+2	13884+1	0.2068
315849+2	96962+0	0.2612	315396+2	53204+0	0.1541	314792+2	57210+0	0.1162
314339+2	48596+0	0.1336	313736+2	56044+0	0.1739	313285+2	48932+C	0.1818
312833+2	45248+0	0.2013	312232+2	37399+0	0.2698	311781+2	38942+0	0.2218
311331+2	28343+0	0.2661	310731+2	38085+0	0.2409	310282+2	54683+0	0.1397
309833+2	74178+0	0.1822	309234+2	66101+0	0.1381	308786+2	69200+0	0.1237
308338+2	10279+1	0.1150	307741+2	13136+1	0.1371	307293+2	17962+1	0.1146
306846+2	65125+1	0.1964	306251+2	15018+2	0.1447	305805+2	22622+2	0.0714
305359+2	22646+2	0.0742	304765+2	19474+2	0.0854	304320+2	17363+2	0.0947
303875+2	13647+2	0.0997	303431+2	95296+1	0.1225	302839+2	71170+1	0.1743
302395+2	59443+1	0.1219	301951+2	66888+1	0.1306	301508+2	38781+2	0.3053
300918+2	10112+3	0.1361	300476+2	12984+3	0.0750	300034+2	13691+3	0.0709
299592+2	11726+3	0.0773	299004+2	10462+3	0.0690	298563+2	81803+2	0.1292
298123+2	47372+2	0.1831	297683+2	24051+2	0.1787	297243+2	15093+2	0.1457
296657+2	11903+2	0.1795	296218+2	61110+1	0.1482	295779+2	41408+1	0.1722
295341+2	25498+1	0.1462	294903+2	21195+1	0.1113	294319+2	14721+1	0.1668
293882+2	10174+1	0.1274	293445+2	79663+0	0.1422	29308+2	58373+C	0.1450
292572+2	46652+0	0.2252	292136+2	52532+0	0.1942	291555+2	61250+C	0.1058
291120+2	11842+1	0.1327	290685+2	36751+1	0.2428	290250+2	18329+2	0.2796
289816+2	31617+2	0.0985	289382+2	46450+2	0.0672	288948+2	43272+2	0.0691
288515+2	38060+2	0.0684	287938+2	34322+2	0.0676	287505+2	25981+2	0.0790
287073+2	29731+2	0.0759	286641+2	36553+2	0.1043	286210+2	49387+2	0.0929
285348+2	72132+2	0.0690	284917+2	75393+2	0.0746	284487+2	73759+2	0.0719
284057+2	63994+2	0.0746	283628+2	55773+2	0.0772	283198+2	45520+2	0.0727
282770+2	38531+2	0.0762	282341+2	31883+2	0.0679	281770+2	25932+2	0.0767
281342+2	22641+2	0.0680	280915+2	19205+2	0.0660	280488+2	16778+2	0.0762
280061+2	15863+2	0.0720	279634+2	14021+2	0.0700	279208+2	11643+2	0.0746
278783+2	10744+2	0.0819	278357+2	87774+1	0.0763	277532+2	82822+1	0.0789
277507+2	73641+1	0.0770	277083+2	65395+1	0.0905	276658+2	59775+1	0.0836
276235+2	56587+1	0.0928	275811+2	54128+1	0.1015	275388+2	44022+1	0.0962
274965+2	39745+1	0.0937	274543+2	34202+1	0.0878	274261+2	31384+1	0.0963
273839+2	30341+1	0.0923	273417+2	29071+1	0.0978	272996+2	24373+1	0.1369
272575+2	20311+1	0.1314	272154+2	21700+1	0.0901	271734+2	17497+1	0.1519
271314+2	16643+1	0.1810	270894+2	14472+1	0.1112	270475+2	12301+1	0.1581
270056+2	11537+1	0.1448	269637+2	11642+1	0.1154	269219+2	99004+C	0.1426
268801+2	92483+0	0.1177	268523+2	72487+0	0.2147	268105+2	43419+0	0.2452
267688+2	49165+0	0.1534	267271+2	72484+0	0.1532	266855+2	63227+0	0.1443
266438+2	75693+0	0.1199	266023+2	64806+0	0.2246	265607+2	57193+0	0.2151
265330+2	58182+0	0.1754	264915+2	48816+0	0.2119	264501+2	45644+0	0.2518
264086+2	47576+0	0.1852	263672+2	51911+0	0.2727	263259+2	43465+C	0.2335
262845+2	41271+0	0.2613	262570+2	47937+0	0.1819	262157+2	52237+0	0.3461
261745+2	78169+0	0.3559	261333+2	49251+0	0.2033	260921+2	81490+C	0.2581
260509+2	58303+0	0.2111	260235+2	61312+0	0.1687	259824+2	54461+0	0.2165
259414+2	50009+0	0.2339	259004+2	36395+0	0.3775	258594+2	41103+0	0.2496
258321+2	34993+0	0.3230	257911+2	43070+0	0.3439	257502+2	34515+C	0.3585
257093+2	62299+0	0.3467	256821+2	39790+0	0.3780	256413+2	48093+C	0.2907
256005+2	52557+0	0.2503	255598+2	58196+0	0.2556	255326+2	59432+C	0.1968
254919+2	68603+0	0.1529	254512+2	75514+0	0.1347	254106+2	1C248+1	0.1331
253835+2	12503+1	0.1600	253430+2	19935+1	0.1205	253024+2	48849+1	0.3741
252619+2	23290+2	0.5059	252349+2	45815+2	0.1593	251945+2	59723+2	0.0806
251540+2	51324+2	0.0831	251137+2	42181+2	0.0751	250867+2	36312+2	0.0719
250464+2	26733+2	0.1052	250061+2	14381+2	0.1137	249793+2	1C979+2	0.1386
249390+2	55881+1	0.2051	248988+2	32586+1	0.1326	248720+2	19397+1	0.1604

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
248318+2	15313+1	0.1176	247917+2	97848+0	0.1369	247650+2	74126+0	0.2194
247249+2	57587+0	0.1241	246849+2	46547+0	0.1687	246582+2	63029+0	0.2622
246182+2	18573+1	0.3802	245783+2	10453+2	0.1779	245516+2	18729+2	0.1017
245117+2	20560+2	0.0725	244719+2	16117+2	0.0967	244453+2	14210+2	0.0803
244055+2	11796+2	0.0864	243657+2	86833+1	0.0964	243392+2	54381+1	0.1762
242995+2	29911+1	0.1164	242598+2	18497+1	0.1829	242334+2	15725+1	0.2181
241937+2	10887+1	0.4223	241673+2	52347+0	0.1597	241278+2	39095+0	0.2097
240882+2	23351+0	0.2514	240619+2	15668+0	0.3202	240224+2	18140+0	0.5770
239961+2	10773+0	0.4255	239566+2	72770-1	0.5774	239172+2	64580-1	0.7061
238910+2	31572-1	1.4310	238516+2	91880-1	0.9627	238254+2	85550-1	0.6218
237861+2	10282-2	55.6458	237599+2	93730-2	5.8381	237207+2	-38798-1	1.4163
236945+2	24435-1	4.7649	236553+2	10562+0	0.6988	236162+2	58060-1	1.0479
235901+2	57460-1	1.1151	235510+2	93110-1	0.7420	235250+2	-32651-1	1.8184
234859+2	59840-1	0.7444	234599+2	-38874-1	1.2186	234209+2	12486+0	0.6189
233949+2	10415+0	0.5375	233560+2	45890-1	0.9996	233301+2	70024-1	0.6621
232912+2	10686+0	0.4315	232653+2	21272+0	0.2329	232265+2	22215+0	0.3291
232006+2	22068+0	0.2590	231618+2	17936+0	0.3833	231360+2	11973+0	0.5335
230973+2	93520-1	0.7557	230715+2	60910-1	1.9017	230328+2	13072+0	0.5539
230071+2	64000-1	0.9297	229684+2	-12012+0	0.6880	229427+2	11134-1	4.6865
229042+2	37361-1	1.5973	228785+2	-12700+0	0.6257	228400+2	64290-1	0.7561
228143+2	72810-1	0.6450	227759+2	-45209-1	1.2187	227503+2	57901-1	0.9594
227119+2	13145+0	0.7121	226863+2	57700-1	0.8119	226480+2	-13410-2	59.6663
226224+2	16119+0	0.8121	225969+2	12272+0	0.7087	225587+2	26233-1	2.3301
225332+2	-10967+0	0.2836	224950+2	66030-1	0.8734	224695+2	95076-1	0.9152
224314+2	11749+0	0.6834	224060+2	81120-1	0.6535	223806+2	18728+0	0.6190
223425+2	-44349-1	2.1944	223171+2	17028+0	0.9594	222791+2	33819+0	0.4579
222538+2	40925+0	0.5801	222285+2	72689+0	0.3374	221905+2	30764+1	0.2595
221652+2	53282+1	0.0957	221274+2	68725+1	0.1038	221021+2	62679+1	0.0942
220769+2	62689+1	0.0857	220391+2	53833+1	0.1133	220139+2	45342+1	0.1413
219761+2	31735+1	0.1767	219510+2	17323+1	0.3128	219258+2	12234+1	0.3177
218882+2	88035+0	0.1678	218631+2	80920+0	0.1563	218380+2	72480+0	0.1362
218004+2	80337+0	0.1159	217753+2	10868+1	0.1160	217503+2	21517+1	0.3021
217128+2	10902+2	0.2053	216878+2	26435+2	0.1379	216503+2	47837+2	0.1148
216253+2	52977+2	0.0740	216004+2	45332+2	0.0999	215630+2	40251+2	0.0951
215381+2	32222+2	0.1225	215132+2	23641+2	0.1403	214883+2	16920+2	0.2244
214510+2	11709+2	0.1442	214261+2	76936+1	0.1875	214013+2	54562+1	0.2197
213641+2	30860+1	0.2439	213393+2	20704+1	0.1759	213145+2	17373+1	0.1429
212774+2	13150+1	0.2192	212526+2	95552+0	0.1783	212279+2	54597+0	0.2395
211908+2	53890+0	0.1769	211661+2	38429+0	0.2543	211414+2	43549+0	0.1944
211168+2	39166+0	0.2232	210798+2	36684+0	0.3738	210552+2	20985+0	0.2759
210306+2	32578+0	0.3679	209937+2	25852+0	0.3684	209691+2	18870+0	0.4488
209445+2	16998+0	0.3019	209200+2	12933+0	0.5005	208832+2	-11480+0	0.7205
208587+2	30730-1	1.6361	208342+2	-47743-1	1.5600	208097+2	-35486-1	1.4149
207730+2	84040-1	0.5816	207486+2	-54665-1	0.9123	207241+2	-11770+0	0.6700
206997+2	17201+0	0.7446	206631+2	90460-1	0.7470	206387+2	60520-1	1.7605
206144+2	11699+0	1.2510	205900+2	-11605+0	0.5183	205657+2	-23762+0	0.4384
205292+2	-38830+0	0.4229	205049+2	-20260-1	5.0355	204806+2	30109+0	0.4682
204563+2	42934+0	0.2539	204199+2	44575+0	0.3580	203957+2	46282+0	0.2790
203715+2	81148+0	0.2092	203473+2	22406+1	0.1755	203231+2	29993+1	0.1068
202868+2	29013+1	0.1012	202627+2	26352+1	0.1251	202385+2	20939+1	0.1426
202144+2	20077+1	0.1511	201903+2	11644+1	0.1989	201662+2	69604+0	0.1641
201301+2	56534+0	0.1562	201060+2	21089+0	0.4440	200820+2	14383+0	0.5004
200579+2	67890-1	0.9947	200339+2	16747+0	0.4057	200099+2	23464+0	0.3770
199739+2	31647+0	0.2499	199500+2	29630+0	0.2880	199260+2	17405+0	0.5033

## 238 PU(N,F) PERSIMMCN REPORT LA-41C8-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
199021+2	51920-1	1.1730	198782+2	14384+0	0.5C79	198542+2	17739+C	0.3725
198184+2	97920-1	0.6950	197945+2	39371-1	1.55G1	197707+2	5930C-1	1.5649
197468+2	12965+0	0.4590	197230+2	21895+0	0.3127	196992+2	12909+C	0.6044
196754+2	41710-1	2.1758	196516+2	96870-1	0.8131	196160+2	2772C+0	0.3100
195922+2	46365+0	0.2262	195685+2	66299+0	0.1796	195448+2	88614+C	0.1652
195211+2	71796+0	0.1683	194974+2	90038+0	0.1341	194737+2	1C744+1	0.1359
194500+2	12585+1	0.1169	194264+2	15937+1	0.093C	193909+2	22025+1	0.1150
193673+2	47093+1	0.1162	193437+2	14002+2	0.2319	193201+2	36129+2	0.1620
192966+2	94739+2	0.1219	192730+2	13678+3	0.0697	192495+2	14415+3	0.0686
192260+2	12623+3	0.0662	192025+2	11168+3	0.066G	191790+2	87452+2	0.1047
191555+2	60815+2	0.0862	191203+2	44694+2	0.1325	190968+2	25104+2	0.0855
190734+2	18509+2	0.0987	190500+2	11819+2	0.1293	190266+2	74731+1	0.1377
190032+2	41962+1	0.1023	189798+2	32C36+1	0.09C7	189565+2	26654+1	0.1146
189331+2	20015+1	0.1551	189098+2	16977+1	0.3171	188865+2	11873+1	0.1350
188632+2	83400+0	0.2041	188399+2	65137+0	0.2399	188167+2	43522+C	0.3785
187934+2	27684+0	0.4924	187702+2	28005+0	0.5767	187469+2	46996+C	0.5103
187237+2	34913+0	0.4517	187005+2	31387+0	0.4376	186773+2	3C182+C	0.4277
186542+2	15196+0	0.4700	186310+2	14916+0	0.4466	186C79+2	12454+0	0.9703
185848+2	13414+0	0.4562	185616+2	42780-1	2.7524	185385+2	17913+C	0.5354
185155+2	17069+0	0.4368	184924+2	29914+0	0.5899	184694+2	23264+0	0.3771
184463+2	19983+0	0.5911	184233+2	42145+0	0.2414	184C03+2	10036+1	0.1461
183773+2	43879+1	0.2166	183543+2	15287+2	0.1624	183313+2	31850+2	0.0988
183084+2	40830+2	0.0674	182855+2	39762+2	0.0693	182625+2	37368+2	0.0669
182396+2	31910+2	0.0767	182167+2	24650+2	0.0949	181939+2	17294+2	0.0887
181710+2	11219+2	0.1381	181482+2	76830+1	0.1228	181253+2	46573+1	0.1012
181025+2	23993+1	0.0904	180797+2	18691+1	0.1439	180569+C	13393+1	0.2076
180341+2	96652+0	0.1434	180114+2	72362+0	0.19CC	179886+2	53718+0	0.2581
179659+2	54285+0	0.2863	179432+2	47197+0	0.2727	179205+2	4508C+0	0.3121
178978+2	24987+0	0.5322	178751+2	50809-1	0.9875	178638+2	78141-1	0.5555
178411+2	22502+0	0.4978	178185+2	23688+0	0.55C7	177959+2	25152+C	0.2636
177658+2	62393+0	0.1517	177545+2	26989+1	0.4046	177319+2	1C583+2	0.1048
177093+2	19422+2	0.0916	176642+2	18603+2	0.1228	176417+2	16434+2	0.1182
176192+2	14474+2	0.1027	175967+2	11788+2	0.1440	175742+2	98912+1	0.2100
175518+2	57266+1	0.1823	175293+2	32839+1	0.1875	175181+2	26507+1	0.1254
174957+2	20539+1	0.1643	174733+2	16849+1	0.1547	174508+2	1C162+1	0.1900
174285+2	74489+0	0.2270	174061+2	71683+0	0.1971	173837+2	5C188+C	0.3432
173614+2	35497+0	0.3693	173502+2	31611+0	0.3057	173279+2	35118+C	0.2223
173056+2	27818+0	0.3040	172833+2	24862+0	0.4893	172610+C	16718+C	0.4094
172388+2	29466+0	0.4397	172165+2	23566+0	0.6364	171943+2	36985+0	0.2742
171832+2	13650+1	0.1816	171610+2	37382+1	0.1146	171388+2	51774+1	0.0970
171166+2	58631+1	0.0975	170944+2	62450+1	0.0893	170722+2	53902+1	0.1129
170501+2	46122+1	0.1344	170390+2	38976+1	0.1668	170169+2	29980+1	0.1407
169948+2	23828+1	0.1769	169727+2	14673+1	0.1802	169507+2	12041+1	0.1851
169286+2	71999+0	0.2486	169176+2	41C97+0	0.3635	168955+C	4448C+C	0.3787
168735+2	32191+0	0.2522	168515+2	18727+0	0.4179	168295+2	1C98C+C	0.5125
168075+2	95440-1	0.7364	167965+2	-11403+0	1.6595	167746+2	6728C-1	0.7379
167526+2	91940-1	0.7482	167307+2	10733+0	0.6295	167088+2	13857+C	0.7137
166978+2	-31230-1	6.9461	166759+2	21015+0	0.562C	166541+2	-2487C-1	2.6718
166322+2	11095+0	0.7478	166104+2	11458+0	0.580C	165994+2	11267+0	0.8923
165776+2	11300+0	0.7411	165558+2	43327+0	0.3139	165340+2	74216+0	0.1586
165122+2	10428+1	0.1133	165013+2	10251+1	0.1918	164796+2	72456+0	0.1957
164578+2	78223+0	0.3425	164361+2	59137+0	0.4878	164144+2	47794+C	0.3677
164035+2	36802+0	0.3958	163818+2	30877+0	0.3404	163601+2	25036+0	0.4403
163385+2	77674-1	0.9942	163276+2	94150-1	0.7674	163C60+2	12721+C	0.67C3

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
162843+2	63440-1	1.0666	162627+2	-15424+0	0.6731	162519+2	-3C715+0	0.3149
162303+2	13274+0	1.2141	162087+2	-62121-1	0.8C18	161872+2	-11043+0	0.3890
161764+2	-13640+0	0.5945	161549+2	-13436+0	0.3366	161333+2	-17772+C	0.3466
161118+2	15040+0	1.1518	161011+2	10320+0	1.7756	160796+2	-71086-1	0.8412
160581+2	-16014+0	0.4410	160366+2	-54990-1	1.0658	160259+2	-12390+C	0.5535
160044+2	-19308+0	0.4471	159830+2	61860-2	23.1338	159616+2	-13772+C	0.5334
159509+2	-14653+0	0.3434	159295+2	45353-1	1.6457	159081+2	-18274+C	0.8535
158868+2	-25009+0	0.2806	158761+2	-14646+0	0.2479	158547+2	83429-1	1.8872
158334+2	-20900+0	0.4360	158228+2	16625+0	0.8439	158C14+2	21070-1	4.3050
157802+2	-63803-3140.5023	157589+2	73120-1	1.1073	157482+2	11834+C	1.2002	
157270+2	11288+0	0.8616	157057+2	17690+0	1.5168	156951+2	1C363+C	1.3087
156739+2	-59400-1	2.1435	156527+2	36310-1	3.1309	156421+2	-69780-1	1.4217
156209+2	-64530-1	4.8926	155998+2	-38527-1	9.7688	155892+2	-35242+C	0.8408
155680+2	-66353+0	0.2948	155469+2	-55505+0	0.59C9	155258+2	-4523C+C	0.7000
155152+2	-28052+0	1.3574	154941+2	44055+0	0.8949	154730+C	34945+C	0.8469
154625+2	-25518+0	0.7099	154415+2	35159-1	7.2388	154204+2	34635+C	1.1216
154099+2	35857+0	1.0459	153889+2	47721+0	0.7631	153679+2	23594+C	0.6286
153574+2	45074+0	0.3610	153364+2	42846+0	0.3547	153154+2	-13567+0	0.7516
153049+2	42358+0	0.3809	152840+2	39362+0	0.3532	152630+C	51559+C	0.2247
152526+2	51131+0	0.2458	152316+2	83576+0	0.1622	152107+2	14552+1	0.1419
152003+2	40025+1	0.3571	151794+2	16983+2	0.1799	151690+2	34605+2	0.1416
151481+2	58228+2	0.0978	151273+2	73964+2	0.0843	151169+2	78013+2	0.0928
150960+2	71726+2	0.0851	150752+2	65070+2	0.1028	150648+2	51962+2	0.1194
150441+2	35303+2	0.1463	150233+2	25487+2	0.10CC	150129+2	16175+2	0.1270
149922+2	95511+1	0.1319	149818+2	84541+1	0.1421	149611+2	55365+1	0.1743
149404+2	34912+1	0.1824	149300+2	30557+1	0.1683	149C93+2	23272+1	0.1730
148990+2	15251+1	0.1842	148783+2	13565+1	0.2130	148576+2	11637+1	0.1694
148473+2	88406+0	0.2032	148267+2	74166+0	0.2721	148C61+2	51635+C	0.2481
147958+2	83812+0	0.3692	147752+2	49666+0	0.2755	147649+2	47502+0	0.3536
147443+2	37414+0	0.3105	147237+2	45626+0	0.418C	147135+2	59429+C	0.6053
146929+2	28511+0	0.3187	146827+2	33567+0	0.3177	146621+2	32152+0	0.4342
146416+2	35231+0	0.5850	146314+2	16541+0	0.6144	146109+2	47558+C	0.5384
146007+2	13245+0	0.6206	145802+2	48540+0	0.5309	14570C+2	27120+C	0.3984
145496+2	17892+0	0.6850	145291+2	27837-1	3.2301	145189+2	44808+C	0.5304
144985+2	23389+0	1.1090	144883+2	37591+0	0.6371	144680+2	24197+C	1.0488
144578+2	28849+0	0.5543	144374+2	34078+0	0.8004	144171+2	1C812+C	1.0894
144069+2	22874+0	0.5356	143866+2	24939+0	0.9843	143764+2	18591+C	0.7025
143561+2	29037+0	0.8282	143460+2	30733+0	0.7669	143257+2	15524+C	1.0711
143156+2	19195+0	0.5884	142953+2	24529+0	0.7511	142751+2	24C68+C	0.82C9
142650+2	20177+0	0.5824	142447+2	23345+0	0.594C	142346+2	27420+C	0.6774
142144+2	82460-1	1.2179	142043+2	37698+0	0.6261	141842+2	36390+C	0.3969
141741+2	25300+0	0.5850	141539+2	26267+0	0.6518	141438+2	38236+C	0.5410
141237+2	45806+0	0.5047	141136+2	53288+0	0.5455	140935+2	62912+C	0.4921
140734+2	50495+0	0.4293	140634+2	74055+0	0.2549	140433+2	11402+1	0.2771
140333+2	48088+1	0.2180	140132+2	72290+1	0.1114	140032+2	9C773+1	0.0851
139832+2	10030+2	0.0941	139732+2	10323+2	0.0845	139532+2	11023+2	0.0966
139432+2	84556+1	0.1568	139232+2	67862+1	0.1466	139132+2	43755+C	0.1988
138932+2	32027+1	0.2543	138832+2	21762+1	0.1972	138633+2	12468+1	0.2169
138533+2	10391+1	0.3073	138334+2	74500+0	0.3922	138234+2	65923+C	0.4450
138035+2	45279+0	0.4675	137936+2	23094+0	0.6758	137737+2	21193+C	1.0514
137638+2	24420+0	0.8515	137439+2	-60665-1	1.4867	137340+2	27271+C	0.6706
137142+2	20542+0	0.5922	137042+2	13493+0	1.049C	136844+2	38165-1	5.2583
136745+2	91300-1	1.3707	136547+2	87820-1	1.4917	136448+2	2C111+C	0.7479
136251+2	15496+0	1.0464	136152+2	22860+0	1.1023	135954+2	4705C-1	3.9870

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=0.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
135856+2	-10518+0	0.8592	135757+2	-22185+0	0.7489	135560+2	-27449-2	56.5624
135461+2	-17449-1	9.8018	135264+2	-18136+0	0.7034	135166+2	27660-1	9.4613
134969+2	-14151+0	0.9469	134871+2	12440+0	2.2986	134674+2	-72860-2	29.3186
134576+2	-14123+0	0.6075	134379+2	-19816+0	0.3801	134281+2	38884+C	1.0640
134085+2	93300-1	1.7671	133987+2	20182+C	0.8388	133889+2	3C019+0	1.1554
133693+2	-64162-1	1.8491	133596+2	14964+0	1.4895	133400+2	15059+C	0.9646
133302+2	22723+0	0.6533	133107+2	65001+0	0.5280	133009+2	1C254+1	0.2127
132814+2	19057+1	0.1676	132716+2	23859+1	0.1485	132619+2	3C033+1	0.1041
132424+2	33688+1	0.1269	132327+2	34108+1	0.1478	132132+2	3C175+1	0.1732
132035+2	21341+1	0.2594	131840+2	15125+1	0.2517	131743+2	1C399+1	0.2189
131646+2	69825+0	0.2851	131452+2	30305+0	0.4971	131355+2	2670C-2	44.4224
131161+2	-17820-1	8.4382	131064+2	58583+0	0.6920	130870+2	-17534+0	0.9105
130773+2	32100-2	46.3630	130676+2	10702+0	1.3520	130483+2	18744-1	15.2118
130386+2	-37470+0	0.4472	130193+2	-18512+0	1.0567	130C96+2	-34557+C	0.7207
130000+2	-14994+0	1.2407	129807+2	10120-1	19.0102	12971C+2	-12420-1	13.3109
129518+2	35160-1	5.2023	129421+2	34553+0	0.5087	129229+2	42049+0	0.4146
129133+2	31337+0	0.4990	129037+2	22437+0	0.8920	128844+2	19190+0	1.0719
128748+2	19367+0	1.1355	128556+2	16038+0	0.9022	12846C+2	7568C-1	3.6629
128364+2	-15821+0	0.7573	128173+2	21C05+0	0.5814	128C77+2	19386+C	0.6836
127981+2	26605+0	0.6726	127790+2	63470-1	3.2932	127694+2	-1E544+0	0.4602
127503+2	66090-1	3.2154	127407+2	15140+0	1.390C	127312+2	27330-1	4.7179
127121+2	41090-1	3.0566	127025+2	-17411+0	1.033C	126835+2	-89254-1	2.2979
126739+2	17542+0	0.7722	126644+2	73C90-1	2.8C3C	126454+2	13646+C	0.9021
126358+2	27443+0	0.4079	126263+2	94219-1	1.3690	126C73+2	2304C+0	0.5235
125978+2	19449+C	0.6622	125788+2	28747+0	0.8758	125693+2	29686+C	0.5345
125598+2	28755+0	0.4757	125409+2	27255+0	0.4478	125314+2	27793+C	0.4182
125219+2	-11909-1	11.2390	125030+2	28039+0	0.4659	124935+2	48688+C	0.2884
124841+2	50791+0	0.3786	124652+2	50664+0	0.2421	124557+2	41089+C	0.2931
124463+2	46302+0	0.2824	124274+2	55819+0	0.2292	12418C+2	57558+C	0.3376
124085+2	58980+0	0.2163	123897+2	60734+0	0.2619	123803+2	13571+1	0.1930
123615+2	14279+1	0.1281	123521+2	17504+1	0.1367	123426+2	21555+1	0.1307
123238+2	36664+1	0.1541	123145+2	72122+1	0.158C	123C51+2	13995+2	0.1148
122863+2	40560+2	0.1634	122769+2	74770+2	0.0879	122675+2	87487+2	0.0828
122488+2	10068+3	0.0715	122394+2	10759+3	0.0757	122301+2	1C613+3	0.0777
122207+2	92740+2	0.0784	122020+2	75916+2	0.0953	121927+2	61415+2	0.0889
121833+2	41128+2	0.1078	121647+2	28144+2	0.1C42	121553+2	22682+2	0.1125
121460+2	14968+2	0.1374	121274+2	12C89+2	0.1958	12118C+2	67597+1	0.1138
121087+2	48222+1	0.1493	120901+2	34221+1	0.1850	120808+2	3C493+1	0.1998
120715+2	24558+1	0.2592	120529+2	21596+1	0.2992	120436+2	16601+1	0.3838
120343+2	15511+1	0.3793	120158+2	19853+1	0.4445	120C65+2	14621+1	0.5612
119972+2	10034+1	0.8462	119880+2	-11378+0	4.5041	119695+2	62524+C	1.1359
119602+2	49215+0	1.2096	119509+2	-33478+0	1.2105	119324+2	97958+C	0.3627
119232+2	27813+1	0.2129	119140+2	80084+1	0.1674	118955+2	11641+2	0.1510
118863+2	18159+2	0.1156	118771+2	22653+2	0.0736	118678+2	24871+2	0.0771
118494+2	23810+2	0.0817	118402+2	24302+2	0.0825	118310+2	18883+2	0.1193
118126+2	15450+2	0.1294	118034+2	11411+2	0.1082	117942+2	69560+1	0.1340
117850+2	50015+1	0.1390	117667+2	38011+1	0.1502	117575+2	3C998+1	0.1539
117483+2	19093+1	0.2042	117391+2	14348+1	0.2020	117208+2	11156+1	0.2066
117117+2	59604+0	0.3195	117025+2	63504+0	0.3443	116842+2	59806+C	0.3191
116751+2	43389+0	0.4266	116659+2	36204+0	0.41C3	116568+2	38209+C	0.5000
116385+2	28948+0	0.6912	116294+2	93440-1	1.7882	116203+2	49290-1	3.3713
116111+2	-11700-2137.4216	115929+2	13746+0	1.1667	115838+2	-51910-1	2.5957	
115747+2	18922+0	0.8627	115656+2	25125+0	0.6819	115474+2	3728C-1	4.1203
115383+2	18061+0	0.8257	115292+2	14854+0	1.0337	115202+2	12594+C	1.1349

## 238 PU(N,F) PERSIMMCN REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
115020+2	-18385+0	0.5906	114929+2	17230+0	1.0160	114839+2	20875+0	0.8424
114748+2	51663+0	0.3805	114567+2	58354+0	0.2644	114476+2	84916+0	0.3016
114386+2	14045+1	0.2822	114295+2	28641+1	0.2467	114114+2	70756+1	0.2044
114024+2	24558+2	0.1639	113934+2	30827+2	0.0862	113844+2	36407+2	0.0869
113663+2	45193+2	0.0855	113573+2	47118+2	0.0757	113483+2	43233+2	0.0899
113343+2	41358+2	0.0966	113213+2	36298+2	0.1099	113123+2	27849+2	0.1549
113033+2	18779+2	0.1169	112943+2	14693+2	0.1644	112853+2	10377+2	0.2074
112673+2	69423+1	0.1571	112583+2	53315+1	0.1714	112494+2	36724+1	0.1677
112404+2	25532+1	0.1858	112225+2	19364+1	0.1925	112135+2	15662+1	0.2734
112045+2	82027+0	0.5459	111956+2	79258+0	0.3865	111866+2	91331+0	0.3195
111688+2	10405+1	0.2632	111598+2	10147+1	0.1836	111509+2	14168+1	0.2766
111419+2	15197+1	0.2806	111330+2	15602+1	0.3149	111152+2	10365+1	0.2723
111063+2	98590+0	0.1843	110973+2	88973+0	0.2529	110884+2	10692+1	0.2185
110795+2	24578+1	0.1859	110617+2	71344+1	0.1304	110528+2	10427+2	0.1039
110439+2	14305+2	0.0882	110351+2	18454+2	0.0864	110262+2	21041+2	0.0797
110084+2	19420+2	0.1042	109995+2	21865+2	0.0809	109907+2	18737+2	0.0846
109818+2	14748+2	0.0839	109729+2	10838+2	0.0869	109552+2	82473+1	0.1032
109464+2	51867+1	0.1229	109375+2	41749+1	0.2798	109287+2	24774+1	0.1291
109198+2	20566+1	0.0917	109022+2	18639+1	0.1337	108933+2	13980+1	0.1887
108845+2	99160+0	0.1841	108757+2	54718+0	0.3084	108669+2	40223+0	0.3377
108581+2	-28555+0	0.8422	108404+2	21002+0	0.7562	108316+2	34359+0	0.7279
108228+2	24829+0	0.5629	108140+2	-90213-1	4.0822	108052+2	71441-1	2.6358
107877+2	27325+0	0.6757	107789+2	45027-1	4.2701	107701+2	-16871+0	1.6453
107613+2	-15723+0	0.5928	107526+2	-74455-1	2.8452	107438+2	-21671+0	0.4514
107263+2	-15234+0	0.7700	107175+2	-28704+0	0.6933	107087+2	-41030-1	4.6285
107000+2	34080-1	4.9343	106912+2	-12261+0	1.1821	106825+2	-2C749+C	0.7362
106650+2	-93960-1	2.4837	106563+2	-13806+0	1.0815	106476+2	-22577+C	0.5451
106388+2	-64181-1	1.9954	106301+2	49560-1	4.2012	106214+2	91120-1	1.5185
106127+2	13868+0	1.4069	105953+2	-57131-1	3.2551	105866+2	52620-1	3.1122
105779+2	58262+0	0.7276	105692+2	-63370-1	3.6936	105605+2	55709-1	4.3798
105518+2	10508+0	2.5299	105431+2	-30138+0	0.3760	105257+2	-34049+C	0.3040
105171+2	-12827+0	1.4137	105084+2	25298+C	1.2927	104997+2	-21451+C	0.2697
104911+2	-25405+0	0.5616	104824+2	-37258+0	0.6293	104737+2	-18180+C	0.4850
104564+2	19852+0	1.6563	104478+2	-15110+0	0.6019	104391+2	-2C474+C	0.4047
104305+2	-21733+0	0.3512	104219+2	-21735+C	0.2919	104132+2	-11661+C	1.2731
104046+2	-15508+0	0.7593	103874+2	-35847+0	0.3855	103787+2	-28593+C	0.4490
103701+2	-23024+0	0.2911	103615+2	-44433+0	0.3767	103529+2	-17123+0	0.4859
103443+2	-16417+0	1.4194	103357+2	-26081+0	0.2888	103271+2	-3C550+C	0.3971
103099+2	-46616+0	0.5081	103014+2	-57854+0	0.4394	102928+2	-53119+C	0.4659
102842+2	-34506+0	0.5112	102756+2	-29655+0	0.7314	102670+2	-23597+0	0.4455
102585+2	-27267+0	0.6151	102499+2	-25617+0	0.3299	102414+2	-27019+C	0.5732
102243+2	-30547+0	0.5258	102157+2	-23367+0	0.3551	102072+2	-18834+C	0.4211
101986+2	-26466+0	0.6332	101901+2	-33221+0	0.5507	101815+2	-42370+C	0.5745
101730+2	-28095+0	0.4352	101645+2	-46841+0	0.5059	101560+2	-39801+0	0.7014
101389+2	-23598+0	0.4912	101304+2	-56813+0	0.5115	101219+2	-29350+C	0.4098
101134+2	-45060+0	0.4297	101049+2	-19160+0	0.6094	100964+2	-25591+0	0.9537
100879+2	-36890+0	0.6352	100794+2	-40914+0	0.5299	100709+2	-22090+C	0.6150
100624+2	-16495+0	1.1122	100455+2	-24439-1	6.8334	100370+2	-26195+C	0.3602
100285+2	-16134+0	0.7956	100201+2	-39577+C	0.8335	100116+2	14715+C	0.8874
100031+2	39261+0	0.4936	999574+1	69913+0	0.2846	998729+1	11088+1	0.1832
997884+1	19022+1	0.1536	997039+1	19501+1	0.1916	996195+1	22518+1	0.1553
995352+1	17555+1	0.1724	993665+1	13881+1	0.1591	992822+1	14312+1	0.2086
991980+1	10316+1	0.2862	991138+1	68328+C	0.2950	990296+1	43927+0	0.3469
989455+1	34836+0	0.5254	988614+1	23709+0	0.7120	987774+1	-2C650+0	1.3251

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
986934+1	36130-2	81.4636	986094+1	-11078+0	2.7552	985254+1	-39057+0	0.6287
984415+1	-34101+0	0.3439	983577+1	25270-1	6.4686	981900+1	-31287+0	0.4965
981063+1	-72908+0	0.3799	980225+1	-62007+0	0.4577	979388+1	-28860+C	0.3732
978552+1	-35479+0	0.9557	977716+1	30273+0	1.635C	976880+1	-53217+0	0.5313
976044+1	-54004+0	0.5689	975209+1	-47827+0	0.4116	974374+1	-48071+C	0.3772
973540+1	-61418+0	0.3454	972706+1	-46832+0	0.3242	971872+1	-7C660+C	0.4083
971039+1	-36961+0	0.4293	970206+1	-39674+0	0.5657	969373+1	-8C994+0	0.3518
968541+1	-82766+0	0.3205	966878+1	-23973+0	0.7757	966046+1	14621+0	2.7680
965215+1	-74445+0	0.4426	964385+1	-12304+0	1.4542	963555+1	-28920-1	9.2967
962725+1	57187-1	4.5354	961896+1	16807+0	1.1976	961067+1	26388+0	1.1334
960238+1	-67890-1	4.5527	959410+1	-14550-1	21.139C	958582+1	-48539+C	0.6384
957754+1	-53543+0	0.5870	956927+1	-61356+0	0.5124	956100+1	-1C729+1	0.5659
955274+1	-84613+0	0.5713	954448+1	-86192+0	0.6144	953622+1	-82367+C	0.3636
952796+1	-60356+0	0.4724	951971+1	-90884+0	0.2768	951147+1	-74170+C	0.2233
950322+1	-58039+0	0.3261	949498+1	-63162+0	0.3023	948675+1	-57065+C	0.3577
947851+1	-55801+0	0.2821	947029+1	-58016+0	0.2746	946206+1	-47807+0	0.3111
944562+1	-39264+0	0.4095	943741+1	-29115+0	0.4743	942919+1	-4C938+C	0.5142
942099+1	-67805+0	0.5336	941278+1	-32470+0	0.6346	940458+1	-33491+0	0.8185
939639+1	-42608+0	1.0710	938819+1	-43528+0	0.7229	938000+1	-52661+0	0.5952
937182+1	-49405+0	0.6908	936364+1	-59865+0	0.8723	935546+1	-44288+C	0.6808
934728+1	-51176+0	0.6565	933911+1	-52074+0	0.6177	933094+1	-15158+C	0.9083
932278+1	-51282-1	1.8900	931462+1	-15723+0	1.1484	930646+1	58050-1	3.3015
929831+1	-26396+0	0.3918	929016+1	-25825+0	0.3419	928201+1	-23212+C	0.4835
927387+1	-18676+0	0.4863	926573+1	-38539+0	0.4514	925760+1	-26015+C	0.4050
924947+1	-50648+0	0.5022	924134+1	-53871+0	0.4755	923321+1	-47673+C	0.4964
922509+1	-38216+0	0.7284	921698+1	-13196+0	0.9274	920886+1	-28101+C	0.8431
920075+1	-92397-1	1.1277	919265+1	-28126+0	0.3622	918454+1	-32172+C	0.3456
917644+1	-52940+0	0.4798	916835+1	-35317+0	0.8646	916025+1	-5C284+C	0.6384
915217+1	-27601+0	0.3634	914408+1	-24685+0	0.3585	913600+1	-41784+0	0.8097
912792+1	-45526+0	0.5760	911985+1	-42268+0	0.6048	911178+1	37544+0	1.0561
910371+1	24021+0	1.2380	909565+1	-63680-1	2.6293	908759+1	-12013+C	1.7529
907953+1	-95970-1	1.8771	907148+1	-29835+0	0.6323	906343+1	-34535+0	0.3810
905538+1	92100-1	3.9793	904734+1	-15912+0	0.8572	903930+1	-15858+0	0.9949
903127+1	-35625+0	0.6596	902324+1	-39340-1	6.6956	901521+1	-75138-1	1.9250
900719+1	-17716+0	0.7050	899917+1	-18119+0	1.2900	8999115+1	-32068+C	0.5139
898314+1	-23728+0	0.4630	897513+1	-28561-1	6.9592	896712+1	-22891+C	0.4172
895912+1	-40147+0	0.5123	895112+1	14410+0	2.0653	894313+1	3C847+0	1.0799
893513+1	-24258+0	1.1098	892715+1	-14432+0	0.9335	891916+1	-32869+0	0.7062
891118+1	15484+0	2.0560	890321+1	-81541-1	1.9356	889523+1	-15937+C	0.6109
888726+1	10582+0	1.4980	887930+1	-68596-1	2.2694	887133+1	-18859+0	1.0701
886337+1	12615+0	2.5954	885542+1	-28770+0	0.7171	884747+1	-1C781+C	1.3400
883952+1	-23849+0	0.4855	883157+1	-26972+0	0.7310	882363+1	-15934+C	1.0428
881570+1	-29028+0	0.5750	880776+1	-13629+0	1.0366	879983+1	95760-1	1.4730
879190+1	-21961+0	1.1384	878398+1	-14147+0	1.4872	877606+1	-37433+C	0.5256
876815+1	-36471+0	0.6646	876023+1	-20558+0	0.3928	875233+1	-22942+C	0.6417
874442+1	-17334+0	0.8124	873652+1	-18927+0	0.6703	872862+1	-28869+C	0.5936
872073+1	12835+0	1.6555	871284+1	31200-2	42.8920	870495+1	-15994+0	0.8707
869706+1	18542+0	1.7427	868918+1	-10362+C	1.639C	868131+1	32223+C	1.2518
867344+1	20055+0	1.6551	866557+1	29440+0	1.1132	865770+1	25542+C	1.3503
864984+1	11879-1	24.6700	864198+1	15752+0	1.5629	863413+1	-31420-1	5.2149
862628+1	-27639-1	6.0686	861843+1	-17900-2113.3232	861058+1	-11951+C	1.6349	
860274+1	-60472-1	3.1437	859491+1	-17347+0	0.9973	858707+1	5810C-2	51.0990
857924+1	13449+0	2.1601	857142+1	11008+0	3.6933	856360+C	55380-1	4.4300
855578+1	17394+0	2.7128	854796+1	51338+0	0.6838	854015+1	51906+0	0.9909

## 238 PU(N,F) PERSIMMCN REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
853234+1	32500-1	11.3183	852454+1	-23962+0	1.1680	851674+1	-1C344+C	3.4087
850894+1	10846+0	2.3370	850115+1	-23979+0	0.7077	849336+1	42520-1	6.3181
848557+1	-71000-3333.5443	847779+1	50453-1	4.8155	847C01+1	3291C-1	5.6572	
846223+1	24942+0	1.4937	845446+1	-34073-1	12.9700	844669+1	6315C-1	4.1931
843893+1	14666+0	1.8046	843117+1	87215-1	2.3495	842341+1	38872+0	0.6180
841565+1	35334+0	0.5724	840790+1	51839+0	0.4496	84CC16+1	43806+C	0.4573
839241+1	58914+0	0.4090	838467+1	49622+0	0.5351	837694+1	63432+C	0.4248
836921+1	12774+1	0.2024	836148+1	23411+1	0.1472	835375+1	53637+1	0.1194
834603+1	85966+1	0.1034	833831+1	17413+2	0.1182	833C6C+1	3278C+2	0.1523
832289+1	50405+2	0.1066	831518+1	70985+2	0.0871	830748+1	81959+2	0.0752
829978+1	90180+2	0.0784	829208+1	89704+2	0.0701	828439+1	79456+2	0.0698
827670+1	70368+2	0.0682	826901+1	56922+2	0.0726	826133+1	42339+2	0.1046
825365+1	28070+2	0.0830	824598+1	19350+2	0.0855	82383C+1	14806+2	0.0814
823064+1	11000+2	0.0890	822297+1	75948+1	0.1162	821531+1	55133+1	0.1161
820765+1	50894+1	0.1353	820000+1	36746+1	0.2459	819235+1	24725+1	0.1425
818471+1	20180+1	0.1376	817706+1	19889+1	0.1894	816542+1	19055+1	0.3475
816179+1	20097+1	0.1795	815416+1	11631+1	0.2117	814653+1	82913+C	0.2986
813890+1	10081+1	0.5116	813128+1	66814+0	0.4413	812367+1	81862+C	0.3290
811605+1	72974+0	0.3448	810844+1	58685+0	0.4100	81CC84+1	54753+C	0.4164
809323+1	54433+0	0.4228	808563+1	47452+C	0.5917	8C7804+1	21598+C	1.2704
807044+1	47512+0	0.6404	806286+1	89618+0	0.7219	8C5527+1	72698+C	0.7095
804769+1	77884+0	0.7001	804011+1	30797+0	0.9533	8C3254+1	65869+C	0.8649
802497+1	21765+0	1.0589	801740+1	-18974+0	2.0827	8C0584+1	3C489+C	0.74C1
799472+1	64114+0	0.9476	798717+1	52656+0	0.9212	757207+1	6535C+C	0.9176
796453+1	34250+0	0.6323	795699+1	53721+0	0.9728	754193+1	72033+0	0.8346
793440+1	13987+0	1.4072	791936+1	34682+0	0.8C72	751184+1	29873+0	1.7333
790433+1	20622+0	1.0127	788931+1	43392+0	1.2135	788181+1	58209+C	0.9849
786681+1	41331+0	0.6180	785932+1	46605+0	0.9231	785183+1	39865+C	0.9944
783687+1	80578-1	2.3381	782939+1	24922+0	1.0613	781445+1	47059+C	1.2150
780698+1	46744+0	0.6924	779952+1	31284+0	0.736C	77846C+1	76016+C	0.4073
777715+1	83826+0	0.3652	776226+1	99582+0	0.2991	775482+1	61359+C	0.3748
774738+1	78550+0	0.8348	773251+1	48975+0	0.4985	772509+1	35915+C	0.5997
771766+1	35660+0	0.7559	770283+1	37233+0	0.6159	764542+1	32850+C	1.1261
768060+1	35690+0	0.9105	767320+1	54C45+C	1.1239	76658C+1	53074+C	0.7389
765102+1	34272+0	0.8623	764363+1	49937+0	1.0183	763624+1	52661+C	1.1622
761411+1	10184+0	1.9102	759938+1	15892+0	1.4108	759202+1	13812+0	1.4978
758466+1	19846+0	1.0920	756260+1	66858+C	0.9176	755526+1	4624C+C	1.3922
754058+1	35715+0	0.8307	753325+1	36944+0	0.9723	752592+1	6436C+C	0.8472
751127+1	78558+0	1.1108	750395+1	66446+0	1.7359	749663+1	54936+C	1.7306
748201+1	23836+0	2.8266	747471+1	53280-1	11.7785	746741+1	-1795C+C	3.2147
745282+1	-93694+0	0.4619	744553+1	-80922+0	0.5252	743824+C	-44462+C	0.7558
742368+1	-14560-1	53.3298	741640+1	-27111+0	1.1975	74C913+C	-19282+C	1.5948
739459+1	-31600-2114.0389	738733+1	-18114+0	1.7254	738C07+1	28944+C	1.1929	
736557+1	13929+0	4.8383	735832+1	12506+C	2.1742	735108+1	2898C-1	8.8796
734384+1	31297+0	2.0804	732937+1	23186+0	1.6653	732214+1	2909C+C	1.4624
731491+1	25418+0	0.9250	730047+1	-52548-1	9.7168	729326+1	-23628-1	8.2776
728604+1	45222+0	1.3167	727163+1	32990+0	1.0750	726443+1	38479+0	1.4034
725723+1	47850+0	1.2037	725004+1	54231+0	1.2C24	723566+1	55897+C	1.1937
722848+1	56735+0	1.1763	722130+1	41815+0	1.3C36	720695+1	54196+C	0.9112
719979+1	59601+0	1.0314	719262+1	23212+0	2.4943	71783C+1	1C628+C	3.8112
717115+1	70941+0	0.9220	716400+1	65280+0	0.9100	714971+1	33176+C	1.5099
714257+1	51772+0	1.2762	713543+1	21809+0	1.1286	71283C+1	26386+C	1.1655
711405+1	14859+0	1.5790	710692+1	52457+0	1.2695	7C9981+1	46735+C	0.8714
709269+1	53520+0	0.7669	707847+1	67002+0	0.4384	7C7137+1	16C94+1	0.2094

## 238 PU(N,F) PERSIMMCN REPORT LA-41C8-MS SYSTEMATIC ERRCR= .053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERRCR
706427+1	19567+1	0.2429	705008+1	12263+2	0.1138	704299+1	16626+2	0.1055
703590+1	25369+2	0.1188	702882+1	37671+2	0.0873	701467+1	43063+2	0.0788
700760+1	40152+2	0.0833	700053+1	34067+2	0.0804	699347+1	24695+2	0.0912
697935+1	12892+2	0.1052	697229+1	88370+1	0.1417	696524+1	59223+1	0.1129
695820+1	52268+1	0.1190	694412+1	31567+1	0.1443	693708+1	27061+1	0.2407
693005+1	20074+1	0.1821	692302+1	17654+1	0.2474	690897+1	12454+1	0.2600
690196+1	95256+0	0.3524	689494+1	10081+1	0.3396	688793+1	55287+0	0.5172
688093+1	62575+0	0.4895	686692+1	54143+0	0.5588	68593+1	71522+0	0.5200
685293+1	56761+0	0.6182	684594+1	82786+C	0.8611	683198+1	68488+0	0.8829
682500+1	63926+0	1.1100	681803+1	41573+C	1.5500	6811C5+1	70164+0	1.2894
680409+1	68120-1	9.1988	679016+1	-68555+C	1.0519	678321+1	-25218+0	4.4624
677625+1	-27077+0	4.9581	676930+1	28589+C	6.2367	676236+1	85738+0	2.2985
674848+1	24080-1	65.1402	674154+1	58560-1	23.6118	673461+1	21934+0	5.7158
672768+1	87004+0	2.3795	672076+1	12272+1	1.5918	670692+1	1C110-1113.3030	
670001+1	-12317+0	8.6418	669310+1	67690-1	16.9655	668619+1	-22439+0	3.9774
667929+1	-47898+0	1.9081	666549+1	-92777+0	0.8450	665860+1	-95758+0	0.7637
665171+1	-14529+1	0.8154	664483+1	-61786+0	1.1338	662419+1	-95552+0	0.9460
661732+1	-52059+0	1.0556	661046+1	-15411+1	0.5933	660359+1	-80526+0	0.7521
659673+1	-82874+0	0.7495	658988+1	-63E68+C	0.9489	657618+1	-33860+0	1.7346
656933+1	-45376+0	1.2126	656249+1	-29938+C	1.7897	655565+1	-71250+0	0.7221
654882+1	-78090+0	0.5879	654199+1	-99E60-1	4.4292	652833+1	-33C81+0	0.9989
652151+1	-77758+0	1.0562	651470+1	-20E83+0	1.5218	650788+1	35437+0	0.9787
650108+1	20990-1	18.2541	649427+1	56509+C	1.4385	648C67+1	78630-1	5.5035
647387+1	55470-1	4.0617	646708+1	45746+C	1.4906	646C29+1	12797+0	5.1098
645351+1	29240-1	8.0837	644673+1	69560-1	4.9803	643318+1	24740-1	9.C934
642641+1	21100-1	28.6701	641964+1	95C20-1	5.1115	641288+1	97400-1	4.8064
640612+1	49518+0	1.3986	639936+1	-53E16-1	4.5927	639261+1	33525+0	2.1769
637912+1	22240-1	11.8109	637238+1	24454+0	1.6241	636564+1	27517+0	2.3527
635890+1	-20290-1	12.1899	635217+1	17491+C	1.7117	634545+1	15583+0	1.7702
633872+1	62660-1	7.0624	633200+1	22400+C	2.5201	632529+1	-86C80-1	3.3265
631186+1	12195+0	2.4470	630516+1	-53140-1	6.1021	629846+1	17190-1	17.8308
629176+1	56800-1	5.0521	628506+1	24E48+C	1.2650	627837+1	112C2+0	2.7067
627169+1	12504+0	3.5457	626500+1	-45170-1	5.4855	625164+1	14761+0	2.3506
624497+1	15543+0	2.2362	623830+1	52350-1	5.6802	623164+1	4C898+0	1.2297
622497+1	27331+0	1.0737	621831+1	20126+0	1.5829	621166+1	-2C889+0	3.C176
620501+1	49140-1	5.6456	619171+1	34E91+C	2.2906	6185C7+1	43674+0	1.2846
617844+1	23630+0	1.3243	617180+1	48153+0	1.7415	616517+1	17280-1	18.5699
615855+1	25783+0	1.3738	615192+1	20202+0	1.5072	61453C+1	15355+0	2.3282
613869+1	19399+0	2.8208	613207+1	69E12+C	1.2945	611886+1	13758+0	2.3095
611226+1	16041+0	1.9023	610566+1	19331+C	1.6735	6C9507+1	27600+0	1.1837
609248+1	57895+0	1.5273	608589+1	29709+0	1.3352	6C7S31+1	68340-1	4.6825
606615+1	75032+0	0.8315	605958+1	21308+0	1.4944	6C5301+1	34398+0	0.9892
604644+1	61730-1	5.2720	603332+1	26542+C	1.2424	6C2677+1	19683+0	1.6331
602021+1	18328+0	1.7835	601367+1	53C01+C	0.7955	6C0712+1	15542+1	0.7273
600058+1	18628+1	0.3192	599404+1	25248+1	0.2334	598751+1	33629+1	0.1978
598098+1	36783+1	0.1436	597446+1	42249+1	0.1666	596793+1	4C5C1+1	0.1838
596141+1	31434+1	0.1689	595490+1	20C58+1	0.2410	594E39+1	94418+0	0.5464
594188+1	75026+0	0.7220	593537+1	58984+0	0.9741	592237+1	17620+0	2.5968
591588+1	95860-1	5.9877	590939+1	32796+0	1.6755	59029C+1	42376+0	1.28C8
589642+1	14650+0	2.8662	588994+1	-26272+C	1.5064	588346+1	-47C80-1	10.99C9
587699+1	58070+0	1.2104	587052+1	-20521+C	2.1059	58640E+1	94600-2	40.2014
585760+1	12671+0	2.6238	585114+1	-17930-1	23.0488	584468+1	29730+0	1.3380
583823+1	44770+0	0.8329	583178+1	44102+C	0.9613	582534+1	36234+0	1.1756
581890+1	35022+0	1.2059	581246+1	-12270-1	33.6163	58C603+1	28994+0	1.2613

## 238 PU(N,F) PERSIMMCN REPORT LA-41C8-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
579960+1	22126+0	2.3993	579318+1	71360-1	5.5392	578033+1	-48897+0	0.7946
577392+1	-27641+0	1.8787	576751+1	-65960-1	5.8178	57611C+1	-6588C-1	6.8817
575469+1	20334+0	2.1145	574829+1	-30734+0	1.653C	57419C+1	-25042+C	1.7723
573550+1	11196+0	4.3242	572911+1	-30352+0	1.3945	572273+1	15930+C	2.4623
571634+1	32662+0	1.5747	570996+1	-21101+0	1.88C2	570359+1	13072+C	2.8550
569722+1	30770-1	12.7330	569085+1	11639+0	6.5726	568448+1	-5910C-2	64.3021
567812+1	47863+0	2.0591	567176+1	16405+0	3.1926	566541+1	53255+C	1.22C4
565906+1	21605+0	2.8722	565271+1	30603+0	1.9549	564031+1	55384+C	1.4905
563369+1	47458+0	1.7756	562736+1	25544+0	1.7367	562103+1	39115+C	2.0144
561391+1	27877+0	2.5575	560758+1	21824+0	3.7484	560127+1	1847C+C	3.9402
559495+1	20634+0	2.1687	558864+1	22027+0	2.5525	558233+1	22364+C	1.6527
557603+1	14244+0	2.4049	556973+1	36632+C	1.1349	556343+1	28683+C	1.3862
555714+1	-63450-1	8.9420	555085+1	11623+C	6.9337	554457+1	13484+C	2.81C1
553828+1	13577+0	2.7218	553200+1	15087+C	2.2292	552573+1	8253C-1	4.1169
551946+1	-31434+0	0.8995	551319+1	21800+0	3.8867	550693+1	23319+C	3.6049
550067+1	16180+0	2.2213	549441+1	25052+C	1.4056	548815+1	18284+C	1.9731
548190+1	18310+0	2.4435	547566+1	-61495-1	5.9333	546942+1	12679+C	6.3828
546318+1	-17093+0	1.6780	545694+1	-35760-2	87.5714	545071+1	8573C-1	4.4126
544448+1	72821-1	4.1147	543203+1	11209+0	2.7618	542582+1	37445+C	1.2562
541960+1	13707+0	2.3482	541339+1	30110+C	2.9057	540718+1	-1C96C-2312.3116	
540098+1	56554-1	5.6242	539478+1	20223+0	1.67C9	538858+1	25753+C	1.2087
538239+1	59660-1	5.0688	537620+1	45471+0	1.4277	536384+1	52349+C	1.2931
535766+1	13384+0	2.2365	535148+1	86470-1	4.52C4	534531+1	33C44+C	1.0629
533914+1	37939+0	1.2759	533298+1	87852+C	1.0603	532066+1	85593+C	1.2090
531451+1	39509+0	1.5478	530836+1	-29827+0	0.9874	530221+1	2C936+C	3.1573
529607+1	11402+0	3.1082	528993+1	13710+0	4.5411	52838C+1	4C16C+C	2.0414
527766+1	48206+0	1.3433	527154+1	-89680-1	4.9084	526541+1	1E423+C	2.5249
525929+1	37824+0	1.8789	525317+1	-16060-1	31.1124	52470e+1	12450+C	3.3573
524095+1	-54335+0	0.7027	523484+1	-10546+0	3.7615	522874+1	23651+0	2.1002
522264+1	56820-1	6.8956	521654+1	-11252+0	2.7669	521045+1	17C71+C	2.9665
520436+1	-36156+0	2.1862	519828+1	-17228+C	4.0837	519220+1	11C76+C	7.7286
518612+1	44319+0	2.2130	518004+1	59268+0	1.7328	517397+1	-7140C-1	4.7858
516790+1	-23707+0	1.1553	516184+1	60757+C	1.4927	515578+1	-71361-1	4.3772
514972+1	31842+0	3.0093	514367+1	-13550+0	2.5151	513762+1	28722+C	2.7764
513158+1	31508+0	3.0310	512553+1	28033+0	2.5295	511950+1	61718-1	9.8333
511346+1	83610-1	5.0605	510743+1	-18755-1	18.8243	51014C+1	6708C-1	4.7791
509538+1	20431+0	1.8832	508936+1	13885+0	3.2617	508334+1	11465+C	5.0442
507732+1	28052+0	2.6220	507131+1	51531+0	1.83C6	506531+1	58356+C	1.8077
505931+1	58148+0	1.6490	505331+1	12979-1	47.5C79	504731+1	24554+C	2.1829
504132+1	38741+0	2.6684	503533+1	77544+0	1.2155	502934+1	24153+C	1.7770
502336+1	37282+0	1.3375	501739+1	-16015+0	4.5848	501141+1	-12495+C	3.2891
500544+1	-40289+0	0.9361	499947+1	37560-1	13.0790	499351+1	48790-1	12.0944
498755+1	-12017+0	4.1912	498159+1	-37882+0	0.9645	497564+1	-17938+C	4.0440
496969+1	58512-1	7.4463	496375+1	78450+0	1.5564	49578C+1	48382+C	2.0674
495187+1	31915+0	2.5672	494593+1	33742+0	2.33C1	49400C+1	15960+C	4.6211
493407+1	18010-1	30.1652	492815+1	23444+C	3.8396	492223+1	2C436+C	4.3745
491631+1	-29462+0	2.9890	491040+1	75320-1	10.48C1	490449+1	4C103+C	2.7215
489858+1	-22164+0	2.0978	489268+1	25230+0	3.8576	488678+1	6713C-1	13.8950
488088+1	20442+0	3.7813	487499+1	65547+C	1.538C	48691C+1	54977+C	1.8577
486322+1	27820+0	2.8778	485734+1	86660-1	6.2704	485146+1	25676+C	3.6826
484559+1	28113+0	2.8687	483972+1	76588+0	1.537C	483385+1	7647C+C	1.5432
482799+1	47310+0	1.8309	482213+1	-19641-1	18.4577	481627+1	7141C-1	13.8806
481042+1	24013+0	4.1588	480457+1	12410+0	7.8185	479872+1	52326+C	2.2752
479288+1	31679+0	3.2876	478704+1	41551+0	2.339C	478121+1	5C930-1	9.3251

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
477538+1	29391+0	4.2608	476955+1	-19644+0	2.5145	476372+1	-4C520+C	1.4917
475790+1	13033+0	3.4128	475209+1	-15583+0	3.595C	474627+1	7550C-1	7.3996
474046+1	23226-1	26.5314	473466+1	31459+0	1.7029	472886+1	33284+0	1.4538
472306+1	25798+0	1.7872	471726+1	14476+0	3.1342	471147+1	32867+C	1.8757
470568+1	37319+0	1.6556	469990+1	37220+0	1.5082	469412+1	56630+0	0.8565
468834+1	85790+0	0.9653	468256+1	85157+0	1.1818	467679+1	2673C+C	1.7456
467103+1	72164+0	0.9494	466526+1	63941+0	0.8431	465951+1	68592+0	0.7603
465375+1	69062+0	0.7571	464800+1	13323+1	1.0707	464225+1	63237+0	0.9275
463650+1	75631+0	0.6869	463076+1	61619+0	0.7939	462502+1	61957+0	0.7916
461929+1	40846+0	1.3079	461356+1	46265+0	1.0967	460783+1	53993+C	0.88C6
460211+1	62476+0	0.8436	459639+1	49811+0	0.9717	459C67+1	13416+0	3.9295
458496+1	30893+0	1.4853	457925+1	34400+0	1.3551	457354+1	53713+0	1.2199
456784+1	30259+0	1.6992	456214+1	30365+0	1.6977	455644+1	13259+1	0.9312
455075+1	35078+0	1.3461	454506+1	63589+0	1.5427	453938+1	72672+C	1.6237
453370+1	38102+0	2.8529	452802+1	10033+1	1.3925	452235+1	58028+C	1.4078
451668+1	43522+0	1.2856	451101+1	42174+0	1.137C	450535+1	35612+C	1.3536
449969+1	50086+0	0.9740	449403+1	55260+0	1.2285	448838+1	58144+0	1.4252
448273+1	10720+1	1.1655	447709+1	63509+0	1.5900	447145+1	12137+1	1.2297
446581+1	37417+0	1.2616	446017+1	64760+0	0.8869	445454+1	4C545+C	1.3422
444892+1	44191+0	1.2534	444329+1	30C14+C	1.627S	443767+1	19561+0	2.7199
443205+1	48390-1	10.3845	442644+1	38871+0	1.4016	442C83+1	91726+C	0.9162
441523+1	43024+0	2.6056	440962+1	13322+1	0.9855	440403+1	84087+0	0.9950
439843+1	55125+0	1.2775	439284+1	59859+0	1.4361	438725+1	31987+C	1.7306
438167+1	56452+0	2.1782	437609+1	48721+0	1.8268	437C51+1	58457+C	1.2179
436494+1	49280+0	1.8140	435937+1	33583+0	2.0393	435380+1	37343+0	2.5875
434824+1	13509+1	1.0375	434268+1	17C16+1	0.8496	433712+1	15362+1	1.0550
433157+1	63204+0	2.0579	432602+1	33841+0	2.328C	432C47+1	15867+C	3.7095
431493+1	13021+0	6.4866	430940+1	69161+0	2.0391	430386+1	38328+C	2.5714
429833+1	38388+0	2.5730	429280+1	69208+0	2.0404	428728+1	69038+C	2.0406
428176+1	98690-1	4.8017	427624+1	51397+0	1.8C04	427C73+1	45712+C	2.2460
426522+1	22142+0	3.6611	425972+1	71597+0	1.5353	425421+1	33986+C	2.1245
424872+1	60286+0	1.9850	424322+1	39066+0	2.5845	423773+1	49501+C	2.78C6
423224+1	13098+0	6.6648	422676+1	26815+0	1.8811	422128+1	38999+C	2.6119
421580+1	15677+0	3.9146	421033+1	60C68+0	2.0232	420486+1	63659+C	1.5663
419939+1	18098+1	0.9764	419393+1	-10500+0	4.5881	418847+1	17578+1	1.0071
418301+1	56885+0	2.3701	417756+1	-20730-1	26.1490	417211+1	-18161+C	2.9453
416667+1	-12034+0	4.5392	416122+1	-12119+0	4.7C9C	415579+1	13461+C	4.2083
415035+1	41360-1	22.9004	414492+1	-11676+0	6.6714	413549+1	583CC-2	97.6466
413407+1	75840-1	7.8283	412865+1	-13478+0	3.2287	412324+1	13265+C	8.0194
411782+1	28472+0	3.8474	411241+1	65493+0	1.7859	410701+1	51701+C	1.17C9
410161+1	25036+0	2.1254	409621+1	34C80+C	2.2647	4C9C81+1	1278C+C	7.2540
408542+1	63510+0	2.0188	408003+1	45345+C	2.8822	4C7465+1	-21207+C	2.2056
406927+1	74914+0	2.0550	406389+1	41820+0	2.6045	4C5852+1	-35694+C	2.7940
405315+1	-16850+0	2.7992	404778+1	-26298+0	1.8C54	4C4242+1	37381+C	1.5559
403706+1	25049+0	5.4862	403170+1	28181+0	4.6947	4C2635+1	35827-1	18.2189
402100+1	24540+0	3.6607	401566+1	-20317-1	28.3393	4C1032+1	43324+C	2.5717
400498+1	57673+0	1.7981	399965+1	-23E81-2256.1163	399432+1	22659+C	3.5384	
398899+1	77929+0	1.7135	398366+1	15C57+C	6.4274	397835+1	56408+C	2.7587
397303+1	31085+0	1.9503	396772+1	-68074-1	7.5751	396241+1	-24379+C	2.11C4
395710+1	-20027+0	6.6164	395180+1	-38111+0	1.2962	394650+1	-45937+C	1.07C1
394121+1	16443+0	3.3419	393591+1	17E19+0	7.4578	393C63+1	-14591+C	5.3839
392534+1	21841+0	2.5592	392006+1	-32884+0	1.6500	391479+1	-1469C+C	5.4121
390951+1	66426+0	2.1062	390424+1	11018+1	1.2639	389898+1	52557+C	2.2702
389371+1	54502+0	2.2397	388845+1	21343-1	31.675C	38832C+1	-15305+C	5.4669

## 238 PU(N,F) PERSIMMON REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
387795+1	-60105+0	0.8610	387270+1	-28595+0	1.8993	386745+1	-32381+C	2.4002
386221+1	-40520+0	2.9516	385697+1	17348+0	2.8667	385174+1	-45965+0	3.0314
384651+1	-38410+0	1.4026	384128+1	56341+0	2.2381	383606+1	24868+0	3.5313
383084+1	-38723+0	1.4037	382562+1	-33915+0	1.5986	382041+1	-41144+0	1.2963
381520+1	-29811+0	1.9059	381000+1	-33601+0	1.6340	380479+1	-67531+0	0.8440
379960+1	-49532+0	1.1300	379440+1	-61119-1	18.1112	378921+1	-37873+C	1.5310
378402+1	-29818-1	23.8104	377884+1	18872-1	38.7881	377366+1	44449+0	1.6646
376848+1	11598+1	0.6796	376331+1	44167+0	1.5368	375814+1	33309+C	2.2323
375297+1	10440+0	5.5793	374781+1	66957+0	1.7950	374265+1	12793+1	1.1632
373749+1	93215+0	1.5307	373234+1	-83457-1	7.317C	372719+1	88034+C	1.9157
372205+1	45745+0	1.6668	371691+1	11397+1	1.6440	371177+1	98578+0	1.3881
370663+1	72499+0	1.0691	370150+1	10266+1	1.1277	369638+1	24910+0	2.7185
369125+1	53354+0	1.3261	368613+1	83436+0	0.7974	368102+1	15885+1	0.9568
367591+1	11350+1	0.7296	367080+1	19123+1	0.6163	366569+1	12533+1	0.8664
366059+1	23024+1	0.6404	365549+1	13721+1	0.7120	365040+1	17489+1	0.5015
364530+1	14414+1	0.5726	364022+1	12727+1	0.8663	363513+1	12358+1	0.7547
363005+1	10711+1	1.1278	362497+1	14089+1	1.3321	361990+1	83941+C	1.9754
361483+1	75974+0	1.8853	360977+1	-82469-1	9.9546	36047C+1	16904+1	1.0170
359964+1	92587+0	2.0494	359459+1	72928+0	1.7064	358954+1	87488+0	1.2050
358449+1	68411+0	1.5452	357944+1	38074+0	1.9049	357440+1	10259+1	1.5329
356936+1	93900+0	1.2525	356433+1	93092+0	2.0695	355930+1	52066+C	1.5355
355427+1	10718+1	0.7608	354925+1	11567+1	1.6565	354423+1	15628+1	1.1084
353921+1	12663+1	0.8820	353420+1	51975+0	1.5621	352919+1	77271+C	1.0785
352418+1	99519+0	1.5870	351918+1	10351+1	2.0458	351418+1	59031+C	1.3341
350919+1	58725+0	1.2456	350420+1	66500+0	1.2661	349921+1	90284+C	1.9779
349423+1	64716+0	2.8153	348925+1	54086+0	3.3997	348427+1	59179+0	2.5656
347929+1	11185+1	0.7737	347433+1	76651+0	1.2232	346936+1	48880-C	38.4820
346440+1	26868+0	2.8001	345944+1	40128+0	2.2196	345448+1	11874+1	1.6417
344953+1	80249+0	1.7988	344458+1	10203+1	0.8370	343964+1	29941+0	2.7007
343469+1	94679+0	1.9848	342976+1	19596+1	1.1130	342482+1	13736+1	1.6337
341989+1	14622+1	1.3304	341496+1	13238+1	1.4478	341004+1	78628+C	2.7601
340512+1	14536+1	1.6375	340021+1	47208+0	3.5257	339529+1	-26509+C	6.6548
339038+1	97278+0	1.9742	338548+1	80097+0	2.7611	338058+1	11463+1	1.8500
337568+1	21009+1	1.1673	337078+1	13187+1	1.6338	336589+1	33150+C	2.4250
336100+1	81054+0	2.7666	335612+1	69714+0	1.5493	335124+1	45205+C	1.9600
334636+1	-69231+0	1.5252	334149+1	-27699+0	6.7010	333662+1	-27840+C	6.5960
333175+1	54692+0	1.7241	332689+1	30371+0	4.8977	332203+1	84010+0	2.7700
331717+1	53072+0	3.2971	331232+1	-57752+0	2.9327	330747+1	25295+0	3.2699
330263+1	-25075+0	4.5745	329779+1	46469+0	3.0028	329295+1	34055+C	3.6243
328811+1	-25686+0	3.0662	328328+1	84622+0	2.7965	327846+1	36415+C	3.6719
327363+1	17569+0	4.9600	326881+1	83213+0	2.6336	326400+1	77512+C	2.3404
325918+1	69742+0	2.2377	325437+1	-50642+0	1.6013	324957+1	31800-1	25.3069
324477+1	66560+0	1.5248	323997+1	10523+1	0.9795	323517+1	1C171+1	1.0332
323038+1	29242+1	0.3826	322559+1	37781+1	0.3035	322081+1	38365+C	0.2988
321603+1	35806+1	0.3264	321125+1	32289+1	0.4065	320648+1	25919+1	0.4018
320171+1	14732+1	0.6848	319694+1	10485+1	0.9650	319218+1	1C957+1	2.0298
318742+1	13382+1	1.5403	318266+1	19883+0	4.4707	317791+1	34615+C	2.5040
317316+1	28368+0	2.9932	316842+1	-70748+0	3.0128	316367+1	-11686+C	7.3402
315990+1	75683+0	1.3285	315516+1	44960+0	2.0112	315043+1	42705+C	3.6333
314570+1	-21993+0	3.8198	314098+1	14040+1	1.6078	313626+1	71593+0	1.4927
313154+1	25236+0	3.5290	312683+1	52382+0	2.9170	312212+1	84537+C	1.4555
311741+1	53872+0	1.9506	311271+1	68056+0	1.9607	310801+1	7C774+C	1.6185
310331+1	65899+0	3.0208	309862+1	15502+1	1.6266	309393+1	96293+C	1.5427
308925+1	99660+0	0.9904	308456+1	81564+0	2.4066	307989+1	1160C+1	1.7488

## 238 PU(N,F) PERSIMMON REPORT LA-41C8-MS SYSTEMATIC ERRCR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERROR	E(EV)	S(BARNS)	ERROR
307521+1	-20929-1	44.2428	307054+1	38961+0	2.5039	306587+1	33679+C	3.6665
306121+1	25639+0	5.6570	305655+1	12087+1	2.1353	305189+1	14312+1	1.7131
304724+1	12680+1	1.7187	304259+1	88C65+0	1.5444	303794+1	71781+C	1.4891
303330+1	10233+1	2.7547	302866+1	10400+1	2.5485	302403+1	73705+C	2.3110
301940+1	13086+1	1.8022	301477+1	94371+0	2.7093	301C14+1	99918+C	2.6790
300552+1	14953+1	2.0352	300090+1	23193+1	1.3876	299629+1	13545+1	1.5013
299168+1	17693+1	1.6114	298707+1	10755+1	2.5485	298247+1	12980+C	1.9673
297787+1	10840+1	2.5485	297328+1	90222+0	2.7313	296868+1	14561+1	2.0205
296409+1	10969+1	2.5485	295951+1	52540-1	24.4750	295493+1	16706+1	1.3868
295035+1	58695+0	2.2088	294577+1	37C47+C	3.6598	294120+1	-14810+C	10.1966
293664+1	13598+1	2.1384	293207+1	-10980+1	2.3961	292751+1	30491+C	6.4212
292295+1	-13681+0	7.6087	291840+1	10838+1	2.2346	291385+1	78848+0	2.5733
290931+1	-56303-1	20.5093	290476+1	33889+0	3.3169	290C22+1	11501+1	2.5511
289569+1	-39898+0	2.5783	289116+1	-87709+0	3.0382	288663+1	38358+C	3.5616
288210+1	29834+0	8.7878	287758+1	11730+1	2.5470	287307+1	82962+C	1.5462
286855+1	11195+1	2.6822	286404+1	11340+1	2.6797	285953+1	4C314+C	4.3694
285503+1	80983+0	1.7943	285053+1	45687-1	30.4762	284603+1	27754+C	4.2182
284154+1	15889+0	7.1622	283705+1	-17541+1	1.4804	283257+1	-94864+C	2.2171
282809+1	40742-1	30.7520	282361+1	-31205+0	5.1890	281513+1	-11925+C	2.0522
281466+1	-37674+0	3.0394	281019+1	-31775+C	5.4062	280573+1	-7C846+C	1.7274
28C127+1	-57859+0	3.9168	279681+1	-14270+1	1.9510	279236+1	-68545+0	1.9906
278791+1	-38817+0	2.8770	278346+1	-98235+0	3.0300	277502+1	-12394+1	2.0482
277458+1	-91983+0	2.5872	277015+1	-37352+0	3.1293	276571+1	-37897+C	3.1753
276129+1	-51623+0	2.6589	275686+1	-82747+0	2.5093	275244+1	-51286+C	2.4185
274802+1	-85664+0	2.4338	274361+1	-44939+0	6.3107	273920+1	25181+C	5.1543
273479+1	-12130+1	2.3648	273039+1	-17C91+0	14.2693	272599+1	-48805+C	5.9242
272159+1	-91117+0	1.3618	271720+1	-11410+1	2.2153	271281+1	-55161+C	2.1762
270842+1	-16682+1	1.2746	270404+1	-13236+1	1.3236	269966+1	-37920+C	3.5788
269529+1	-49152+0	6.5404	269092+1	-56286+0	2.4111	268655+1	-13810+C	2.0274
268218+1	-14914+1	1.9013	267782+1	-50131+C	6.3651	267347+1	-14198+1	1.4344
266911+1	-28341+1	1.0386	266476+1	-17257+1	1.1641	266C42+1	-14761+1	1.2419
265607+1	-11747+1	1.1579	265173+1	-13472+1	1.0172	264740+1	-1C185+C	1.9156
264306+1	-72055+0	2.8065	263874+1	-59278+0	2.2901	263441+1	-19239+C	8.1500
263009+1	-10288+1	1.4131	262577+1	-32105+1	1.0911	262146+1	-29150+C	0.4984
261715+1	-30288+1	0.7409	261284+1	-31810+1	0.8890	260854+1	-19C93+1	1.2575
260424+1	-12942+1	1.5436	259994+1	-21710+1	1.7155	259565+1	-35919+C	0.9829
259136+1	-20863+1	1.2020	258707+1	-16144+1	1.7102	258279+1	-96056+C	2.1305
257851+1	-15317+1	2.2405	257423+1	-15307+1	0.9678	256996+1	-14901+C	1.6232
256569+1	-23337+1	1.6443	256143+1	-26334+1	1.2289	255717+1	-26574+C	0.8383
255291+1	-16535+1	1.0500	254866+1	-30858+1	0.9856	254441+1	-36655+C	0.7272
254016+1	-34570+1	1.0310	253592+1	-22870+1	1.6574	253168+1	-16801+C	1.2620
252744+1	-17773+1	1.9071	252321+1	19462+0	13.9537	251898+1	12584+C	2.0000
251476+1	17422+1	1.4146	251053+1	85441+0	1.8163	250632+1	97637+C	1.7231
250210+1	14283+1	1.1885	249789+1	11C32+1	1.5365	249368+1	74475+C	2.2494
248948+1	89443+0	1.8824	248528+1	81492+0	2.6451	248108+1	12214+C	1.6921
247689+1	21009+1	1.7381	247270+1	15C12+1	1.2655	246851+1	83600+C	1.9513
246433+1	87545+0	2.8304	246015+1	88387+0	1.9394	245598+1	78293+C	2.1049
245180+1	12121+1	1.3914	244764+1	77557+0	2.2331	244347+1	53443+C	3.3205
243931+1	86450+0	4.6709	243515+1	62154+0	2.7808	24310C+1	84873+C	2.1344
242685+1	10542+1	1.7337	242270+1	45815+0	3.714C	241856+1	15555+C	11.1838
241442+1	49396+0	3.4866	241028+1	20754+1	2.105C	240615+1	22006+1	1.6195
240202+1	18444+1	1.9932	239789+1	19482+1	1.9835	239377+1	15148+1	2.1513
238965+1	11217+1	2.4458	238554+1	14690+1	1.824C	238143+1	97396+C	2.5245
237732+1	22050+1	1.5308	237321+1	30691+1	1.4974	236911+1	30437+C	1.5748

## 238 PU(N,F) PERSIMMCN REPORT LA-4108-MS SYSTEMATIC ERROR=.053

E(EV)	S(BARNS)	ERRCR	E(EV)	S(BARNS)	ERRDR	E(EV)	S(BARNS)	ERROR
236502+1	19123+1	1.8328	236092+1	13386+1	2.3800	235683+1	27325+1	1.7366
235275+1	22681+1	2.0305	234866+1	12992+1	2.1303	234459+1	43485+0	5.6836
234051+1	66464+0	2.8625	233644+1	15532+1	1.6888	233237+1	15296+1	2.0947
232830+1	16337+1	1.7346	232424+1	13594+1	1.5833	232018+1	73118+0	2.7580
231208+1	16569+1	1.9081	230399+1	29957+1	1.8317	229995+1	28572+1	1.9239
229591+1	34706+1	1.5722	229188+1	16522+1	3.1960	228785+1	12115+1	3.7607
228382+1	39263+0	7.9302	227980+1	74338+0	2.7419	227578+1	67815+0	4.0732
227177+1	19392+0	28.1958	226776+1	72941+0	6.8569	226375+1	11691+1	4.7319
225974+1	34361+0	9.1766	225574+1	16338+1	2.8694	225174+1	21838+1	2.6390
224775+1	90977+0	6.0777	224376+1	-63269+0	8.6228	223977+1	-24460+1	2.2232
223579+1	-24143+1	0.9537	223181+1	-27508+1	0.8771	222783+1	-40629+1	0.5978
222386+1	-48128+1	0.4709	221989+1	-43667+1	0.5844	221593+1	-33100+1	0.6897
221197+1	-22592+1	1.0401	220801+1	-14777+1	2.1983	220405+1	-10659+1	2.2267
220010+1	-12937+1	1.9300	219615+1	-14564+1	1.7360	219221+1	-12060+1	2.0945
218827+1	-66690+0	3.5422	218433+1	-37493+1	1.6766	218040+1	-45056+1	1.3688
217647+1	-38563+1	1.6377	217254+1	-18531+1	2.4964	216862+1	-31928+1	1.9951
216470+1	-12874+1	1.6601	216079+1	-10791+1	2.4978	215688+1	-74239+0	3.6543
215297+1	-14591+1	1.8515	214906+1	-88650+0	3.1631	214516+1	-96152-1	31.2852
214126+1	-71074+0	3.8103	213737+1	-14311+1	1.9879	213348+1	-14104+1	1.9424
212959+1	-14448+1	2.0015	212571+1	-32354+0	8.6688	212183+1	12968+1	4.2970
211795+1	-51587+0	5.5294	211408+1	-87292+0	3.4544	211021+1	-90192+0	3.3633
210634+1	-82454+0	3.4667	210248+1	-28664+1	2.7608	209862+1	-24299+1	2.3185
209477+1	-23335+1	2.9416	209092+1	-15537+1	4.9117	208707+1	35565+0	9.5890
208322+1	-26268+1	3.2594	207938+1	-17181+1	1.9565	207555+1	-17750+1	1.8089
207171+1	-16117+1	2.0416	206788+1	-25468+1	1.6159	206406+1	-47526+1	1.4517
206023+1	-23939+1	2.5108	205641+1	-13027+1	3.0984	205260+1	-13446+1	2.6029
204879+1	16083+1	3.5762	204498+1	41449+1	1.8445	204117+1	35791+1	2.2530
203737+1	15502+1	5.7607	203357+1	11121+1	3.5925	202978+1	14304+1	3.6371
202599+1	-14341+1	2.6567	202220+1	-19563+1	1.9675	201841+1	-10446+1	3.7633
201463+1	-28112+1	1.4942	201086+1	-39773+1	1.0583	200708+1	-16816+1	3.5863
200332+1	46599+1	2.5465	199955+1	23054+1	4.3141	199579+1	17117+1	2.3333
198827+1	31212+1	1.4408	198452+1	85435+1	4.3335	197703+1	31612+1	1.4563
196955+1	10428+1	4.1383	196581+1	-81258+1	1.6098	195836+1	-29810+1	2.2876
195091+1	-21130+1	2.8758	194720+1	-60480+1	2.5547	193978+1	-10343+0	65.2158
193237+1	-17064+1	5.3512	192498+1	-39097+1	3.1241	192128+1	-22055+1	4.3427
191391+1	-60017+1	2.0847	190655+1	29924+1	3.7418	190288+1	17808+1	2.9194
189921+1	33748+1	1.6408	189554+1	41037+1	1.3190	189188+1	43452+1	1.2756
188822+1	48724+1	1.1667	188457+1	96788+1	0.5923	188091+1	12498+2	0.4610
187727+1	22184+2	0.3685	187362+1	30412+2	0.2730	186998+1	63544+2	0.2012
186634+1	79677+2	0.1804	186271+1	11606+3	0.1834	185908+1	12544+3	0.1504
185545+1	11608+3	0.1457	185182+1	80199+2	0.2045	184820+1	56377+2	0.1948
184459+1	36946+2	0.2760	184097+1	30970+2	0.2693	183737+1	30092+2	0.2653
183376+1	20909+2	0.3244	183016+1	20274+2	0.3379	182656+1	18308+2	0.3709
182296+1	17671+2	0.3784	181937+1	16677+2	0.4075	181578+1	14890+2	0.4506
181220+1	12300+2	0.5221	180862+1	11358+2	0.5584	180504+1	10603+2	0.6221
180147+1	95897+1	0.6632	179789+1	97275+1	0.6810	179433+1	89136+1	0.7685
179076+1	10241+1	7.3664	178720+1	-24460+1	2.7495	178365+1	-85162+1	1.1167
178010+1	-17875+1	3.7413	177655+1	11185+1	6.1990	177295+1	25904+1	2.9805